STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



Division 14 District 1

Contract & Bonds

CONTRACT: DN00455

TIP Number: N/A

FEDERAL: STATE FUNDED

WBS Element: 46441.3.1; 2016CPT.14.16.20751.1; 44569

LOCATION: INTERSECTION OF SR 1326 (PEA RIDGE RD) AND

SR 1330 (JOHN SHEHAN RD) TO 0.01 MILES WEST

OF SR 1332 (MOORE

RD)

COUNTY: POLK

DESCRIPTION: GRADING, PAVING, CURB & GUTTER, RETAINING

WALL

Contractor: CLARY HOOD, INC.

Address: 150 CONWAY BLACK ROAD

SPARTANBURG, SC 29307-5403

Division Engineer: E. A. Green, PE
District Engineer: S. Cannon, PE
Resident Engineer: A. Powell, PE

Letting Date: MARCH 22, 2016

Contract Execution: 4/11/2016

April 2001 A1-DN00455-

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION 14

PROPOSAL

DATE AND TIME OF BID OPENING: March 22, 2016 AT 2:00 PM

CONTRACT ID: DN00455

WBS ELEMENT NO.: 46441.3.1; 2016CPT.14.16.20751.1; 44569

FEDERAL AID NO.: STATE FUNDED

COUNTY:

POLK

TIP NO.:

R-5756

MILES:

0.36 MILES

ROUTE NO.:

SR 1326 (PEA RIDGE RD)

LOCATION:

INTERSECTION OF SR 1326 (PEA RIDGE RD) AND SR 1330

(JOHN SHEHAN RD) TO 0.01 MILES WEST OF SR 1332 (MOORE

RD)

TYPE OF WORK: GRADING, PAVING, CURB & GUTTER, RETAINING WALL

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

THIS IS A ROADWAY PROJECT.

BID BOND IS REQUIRED.

Clary Hood, Inc.

NAME OF BIDDER

150 Conway Black Road, Spartanburg, SC 29307

ADDRESS OF BIDDER

PROPOSAL FOR THE CONSTRUCTION OF CONTRACT No. DN00455 IN POLK COUNTY, NORTH CAROLINA

Date 2/26/2016 20

DEPARTMENT OF TRANSPORTATION, RALEIGH, NORTH CAROLINA

The Bidder has carefully examined the location of the proposed work to be known as Contract No. **DN00455**; has carefully examined the plans and specifications, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned bidder agrees to bound upon his execution of the bid and subsequent award to him by the Department of Transportation in accordance with this proposal to provide the necessary contract payment bond and contract performance bond within fourteen days after the written notice of award is received by him. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract in accordance with the 2012 Standard Specifications for Roads and Structures by the dates(s) specified in the Project Special Provisions and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete State Highway Contract No. DN00455 in Polk County, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications show the details covering this project, and hereby become a part of this contract.

The published volume entitled North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, January 2012 with all amendments and supplements thereto, is by reference incorporated into and made a part of this contract; that, except as herein modified, all the construction and work included in this contract is to be done in accordance with the specifications contained in said volume, and amendments and supplements thereto, under the direction of the Engineer.

If the proposal is accepted and the award is made, the contract is valid only when signed either by the Contract Officer or such other person as may be designated by the Secretary to sign for the Department of Transportation. The conditions and provisions herein cannot be changed except over the signature of the said Contract Officer or Division Engineer.

The quantities shown in the itemized proposal for the project are considered to be approximate only and are given as the basis for comparison of bids. The Department of Transportation may increase or decrease the quantity of any item or portion of the work as may be deemed necessary or expedient.

An increase or decrease in the quantity of an item will not be regarded as sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided for the contract.

Accompanying this bid is a bid bond secured by a corporate surety, or certified check payable to the order of the Department of Transportation, for five percent of the total bid price, which deposit is to be forfeited as liquidated damages in case this bid is accepted and the Bidder shall fail to provide the required payment and performance bonds with the Department of Transportation, under the condition of this proposal, within 14 calendar days after the written notice of award is received by him, as provided in the Standard Specifications; otherwise said deposit will be returned to the Bidder.



Division 14 Contract Officer

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INSTRUCTIONS TO BIDDERS

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID.

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement may cause the bid to be considered irregular and may be grounds for rejection of the bid.

TRADITIONAL PAPER BIDS:

- 1. Download the entire proposal from the Connect NCDOT website and return the entire proposal with your bid. ALL BIDDERS SHOULD CONTACT THE DIVISION 14 CONTRACTING OFFICE VIA EMAIL <u>D14CONTRACTS@NCDOT.GOV</u> PRIOR TO NOON THE DAY OF LETTING TO RECEIVE A VALIDATION EMAIL. Proposals submitted without the validation email may be rejected.
- 2. All entries on the itemized proposal sheet (bid form) shall be written in ink or typed.
- **3.** The Bidder shall submit a unit price for every item on the itemized proposal sheet. The unit prices for the various contract items shall be written in figures. Unit prices shall be rounded off by the Bidder to contain no more than FOUR decimal places.
- **4.** An amount bid shall be entered on the itemized proposal sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount" column of the form.
- 5. The total amount bid shall be written in figures in the proper place on the bid form. The total amount bid shall be determined by adding the amounts bid for each item.
- **6.** Changes to any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink. Do not use correction fluid, correction tape or similar product to make corrections.
- 7. The bid shall be properly executed on the included Execution of Bid Non-collusion Affidavit, Debarment Certification and Gift Ban Certification form. All bids shall show the following information:
 - a. Name of corporation, partnership, limited liability company, joint venture, individual or firm, submitting bid.

Corporations that have a corporate seal should include it on the bid.

- b. Name of individual or representative submitting bid and position or title held on behalf of the bidder.
- c. Name, signature, and position or title of witness.
- d. Completed attestation by Notary Public

Note: Signer, Witness and Notary Public must be different individuals.

- 8. The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- **9.** The Bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 10. THE PROPOSAL WITH THE ITEMIZED PROPOSAL SHEET ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL BE DELIVERED TO AND RECEIVED IN THE NCDOT DIVISION 14 OFFICE, LOCATED AT 253 Webster Road, by 2:00 PM on, March 22, 2016.
- 11. The sealed bid must display the following statement on the front of the sealed envelope:

QUOTATION FOR DN00455 – GRADING, PAVING, CURB & GUTTER, RETAINING WALL AT INTERSECTION OF SR 1326 (PEA RIDGE RD) AND SR 1330 (JOHN SHEHAN RD) TO 0.01 MILES WEST OF SR 1332 (MOORE RD), TO BE OPENED AT 2:00 PM on, March 22, 2016.

12. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

N. C. DEPARTMENT OF TRANSPORTATION

ATTN: Jeffrey E. Alspaugh, EI 253 Webster Road Sylva, NC 28779

OPTIONAL COMPUTER BID PREPARATION:

- 1. All instructions given above for completing and returning TRADITIONAL PAPER BIDS apply, except as modified by the provision "Computer Bid Preparation (Optional)", if applicable.
- **2.** Expedite software necessary for electornic bid preparation may be downloaded from the Connect NCDOT website at: https://connect.ncdot.gov/letting/Pages/EBS-Information.aspx

PROJECT SPECIAL PROVISIONS

GENERAL

MANDATORY PRE-BID CONFERENCE (Prequalifying To Bid):

(7-18-06) (Rev. 3-25-13)

SPD 1-310

In order for all prospective bidders to have an extensive knowledge of the project, all prospective bidders shall attend a mandatory pre-bid conference at Monday, March 14, 2016 at 10:00 AM.

Gravel parking lot at corner of SR 1326 (Pea Ridge Rd) and SR 1330 (John Shehan Rd) by the Welcome Center, Tryon, NC (828) 586-2141

The pre-bid conference will include a thorough discussion of the plans, contract pay items, special provisions, etc.

Only bidders who have attended and properly registered at the above scheduled pre-bid conference and who have met all other prequalification requirements will be considered prequalified to bid on this project. A bid received from a bidder who has not attended and properly registered at the above scheduled pre-bid conference will not be accepted and considered for award.

Attendance at the pre-bid conference will not meet the requirements of proper registration unless the individual attending has registered at the pre-bid conference in accordance with the following:

- (A) The individual has signed his name on the official roster prior to the above noted time for the beginning of the conference.
- (B) The individual has written in the name and address of the company he or she represents.
- (C) Only one company has been shown as being represented by the individual attending.
- (D) The individual attending is an officer or permanent employee of the company they are representing.

Any individual arriving after the official roster has been received by the Engineer will not be eligible to bid. Attendance at any prior pre-bid conference will not meet the requirement of this provision.

COMPUTER BID PREPARATION WITH EMAIL (OPTIONAL):

(3-4-14) 102 SPD 01-050B

The bidder may elect to prepare his bid and MBE/WBE or DBE participation electronically by means of a personal computer. For electronic bid preparation the Contractor shall download the Expedite program from the NCDOT "Project Letting" website. Then download the appropriate ebs electronic file of line items and quantities unique to each project from the Division's website

The only entries into the program which will be permitted by the Bidder are the appropriate unit or lump sum prices for those items which must be bid in order to provide a complete bid for the project, and any MBE/WBE or DBE participation in the appropriate section of the Expedite program. When these entries have been made, the program will automatically prepare a complete set of itemized proposal sheets which will include the amount bid for the various items and the total amount bid for the project in addition to the unit or lump sum prices bid. The computer generated itemized proposal sheets shall be printed and signed by a duly authorized representative in accordance with Subarticle 102-8(A)(8). This set of itemized proposal sheets, when submitted together with the appropriate proposal, will constitute the bid and shall be delivered to the appropriate Division Office or location specified in the INSTRUCTIONS TO BIDDERS. If the Bidder submits his bid on computer generated itemized proposal sheets, bid prices shall not be written on the itemized proposal sheets bound in the proposal. The computer generated itemized proposal sheets (.ebs bid file) may also be copied to a compact disk (CD) furnished by the Contractor and shall be submitted to the Department with the bid or emailed to the Division Proposals Engineer at the time of Letting.

In the case of a discrepancy between the unit or lump sum prices submitted on the itemized proposal sheets and those contained on the CD or email attachment furnished by the Contractor, the unit or lump sum prices submitted on the printed and signed itemized proposal sheets shall prevail.

The requirements of the INSTRUCTIONS TO BIDDERS will apply to the preparation of bids except that a bid may be submitted on computer generated itemized proposal sheets in which case the entries on the itemized proposal sheets will not be required to be in ink. Changes to any entry on the computer generated itemized proposal sheets shall be made in accordance with requirement Number (6) of the INSTRUCTIONS TO BIDDERS. When the computer generated itemized proposal sheets are not signed and received with the proposal, the bid will be considered irregular.

CONTRACT TIME AND LIQUIDATED DAMAGES:

(7-1-95) (Rev. 12-18-07) 108

SP1 G10 A

The date of availability for this contract is **April 21, 2016**.

The completion date for this contract is **June 20, 2016**.

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are **Seven Hundred Fifty Dollars** (\$ 750.00) per calendar day.

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:

2-20-07) 108 SPI G14 A

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall not close or narrow a lane of traffic on **ANY ROAD** during the following time restrictions:

DAY AND TIME RESTRICTIONS

In addition, the Contractor shall not close or narrow a lane of traffic on **ANY ROAD**, detain and/or alter the traffic flow on or during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

- 1. For **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.
- 2. For **New Year's Day**, between the hours of **4:00 PM** December 31st and **7:00 AM** January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until **7:00 AM** the following Tuesday.
- 3. For **Easter**, between the hours of **4:00 PM** Thursday and **7:00 AM** Monday.
- 4. For **Memorial Day**, between the hours of **4:00 PM** Friday and **7:00 AM** Tuesday.
- 5. For **Independence Day**, between the hours of **4:00 PM** the day before Independence Day and **7:00 AM** the day after Independence Day.
 - If **Independence Day** is on a Friday, Saturday, Sunday or Monday, then between the hours of **4:00 PM** the Thursday before Independence Day and **7:00 AM** the Tuesday after Independence Day.
- 6. For **Labor Day**, between the hours of **4:00 PM** Friday and **7:00 AM** Tuesday.
- 7. For **Thanksgiving Day**, between the hours of **4:00 PM** Tuesday and **7:00 AM** Monday.
- 8. For **Christmas**, between the hours of **4:00 PM** the Friday before the week of Christmas Day and **7:00 AM** the following Tuesday after the week of Christmas Day.
- 9. During those events as listed on the Tryon International Equestrian Center's website (see link below):

http://tryon.coth.com/page/2016-tryon-spring-series-competition-calendar

This website listing of events is not to be considered exhaustive and is subject to change without notice. Confirmation of events should be addressed at the weekly coordination meetings, between NCDOT, the Contractor, and the Tryon International Equestrian Center representative.

Holidays and holiday weekends shall include New Year's, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The Contractor shall schedule his work so that lane closures will not be required during these periods, unless otherwise directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for lane closures according to the time restrictions listed herein.

The completion time for this intermediate contract work shall be the time the Contractor is required to complete the removal of all traffic control devices for lane closures according to the time restrictions stated above and place traffic in the existing traffic pattern.

The liquidated damages are **Five Hundred Dollars** (\$ **500.00**) per hour.

NO MAJOR CONTRACT ITEMS:

(2-19-02) (Rev. 8-21-07) 104 SPI G31

None of the items included in this contract will be major items.

NO SPECIALTY ITEMS:

(7-1-95) 108-6 SPI G34

None of the items included in this contract will be specialty items (see Article 108-6 of the 2012 Standard Specifications).

FUEL PRICE ADJUSTMENT:

(11-15-05) (Rev. 2-18-14) 109-8 SPI G43

Revise the 2012 Standard Specifications as follows:

Page 1-83, Article 109-8, Fuel Price Adjustments, add the following:

The base index price for DIESEL #2 FUEL is \$.9532 per gallon. Where any of the following are included as pay items in the contract, they will be eligible for fuel price adjustment.

The pay items and the fuel factor used in calculating adjustments to be made will be as follows:

Description	Units	Fuel Usage Factor Diesel
Unclassified Excavation	Gal/CY	0.29
Borrow Excavation	Gal/CY	0.29
Class IV Subgrade Stabilization	Gal/Ton	0.55
Aggregate Base Course	Gal/Ton	0.55

Sub-Ballast	Gal/Ton	0.55
Asphalt Concrete Base Course, Type	Gal/Ton	2.90
Asphalt Concrete Intermediate Course, Type	Gal/Ton	2.90
Asphalt Concrete Surface Course, Type	Gal/Ton	2.90
Open-Graded Asphalt Friction Course	Gal/Ton	2.90
Permeable Asphalt Drainage Course, Type	Gal/Ton	2.90
Sand Asphalt Surface Course, Type	Gal/Ton	2.90
Aggregate for Cement Treated Base Course	Gal/Ton	0.55
Portland Cement for Cement Treated Base Course	Gal/Ton	0.55
" Portland Cement Concrete Pavement	Gal/SY	0.245
Concrete Shoulders Adjacent to" Pavement	Gal/SY	0.245

SCHEDULE OF ESTIMATED COMPLETION PROGRESS:

(7-15-08) (Rev. 5-19-15) 108-2 SPI G58

The Contractor's attention is directed to the Standard Special Provision entitled *Availability of Funds Termination of Contracts* included elsewhere in this proposal. The Department of Transportation's schedule of estimated completion progress for this project as required by that Standard Special Provision is as follows:

The Contractor shall also furnish his own progress schedule in accordance with Article 108-2 of the 2012 Standard Specifications. Any acceleration of the progress as shown by the Contractor's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE (DIVISIONS):

(10-16-07)(Rev. 4-19-16) 102-15(J) SPI G67

Description

The purpose of this Special Provision is to carry out the North Carolina Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with State funds.

Definitions

Additional MBE/WBE Subcontractors - Any MBE/WBE submitted at the time of bid that will not be used to meet either the MBE or WBE goal. No submittal of a Letter of Intent is required.

Committed MBE/WBE Subcontractor - Any MBE/WBE submitted at the time of bid that is being used to meet either the MBE or WBE goal by submission of a Letter of Intent. Or any MBE or WBE used as a replacement for a previously committed MBE or WBE firm.

Contract Goals Requirement - The approved MBE and WBE participation at time of award, but not greater than the advertised contract goals for each.

Goal Confirmation Letter - Written documentation from the Department to the bidder confirming the Contractor's approved, committed MBE and WBE participation along with a listing of the committed MBE and WBE firms.

Manufacturer - A firm that operates or maintains a factory or establishment that produces on the premises, the materials or supplies obtained by the Contractor.

MBE Goal - A portion of the total contract, expressed as a percentage, that is to be performed by committed MBE subcontractor(s).

Minority Business Enterprise (MBE) - A firm certified as a Disadvantaged Minority-Owned Business Enterprise through the North Carolina Unified Certification Program.

Regular Dealer - A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. A regular dealer engages in, as its principal business and in its own name, the purchase and sale or lease of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock, if it owns and operates distribution equipment for the products. Brokers and packagers are not regarded as manufacturers or regular dealers within the meaning of this section.

North Carolina Unified Certification Program (NCUCP) - A program that provides comprehensive services and information to applicants for MBE/WBE certification. The MBE/WBE program follows the same regulations as the federal Disadvantaged Business Enterprise (DBE) program in accordance with 49 CFR Part 26.

United States Department of Transportation (USDOT) - Federal agency responsible for issuing regulations (49 CFR Part 26) and official guidance for the DBE program.

WBE Goal - A portion of the total contract, expressed as a percentage, that is to be performed by committed WBE subcontractor(s).

Women Business Enterprise (WBE) - A firm certified as a Disadvantaged Women-Owned Business Enterprise through the North Carolina Unified Certification Program.

Forms and Websites Referenced in this Provision

Payment Tracking System - On-line system in which the Contractor enters the payments made to MBE and WBE subcontractors who have performed work on the project. https://apps.dot.state.nc.us/Vendor/PaymentTracking/

DBE-IS Subcontractor Payment Information - Form for reporting the payments made to all MBE/WBE firms working on the project. This form is for paper bid projects only. http://www.ncdot.org/doh/forms/files/DBE-IS.xls

RF-1 *MBE/WBE Replacement Request Form* - Form for replacing a committed MBE or WBE. http://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20WBE%20Replacement%20Request%20Form.pdf

SAF *Subcontract Approval Form* - Form required for approval to sublet the contract. http://connect.ncdot.gov/projects/construction/Construction%20Forms/Subcontract%20Approval%20Form%20Rev.%202012.zip

JC-1 *Joint Check Notification Form* - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.

http://connect.ncdot.gov/projects/construction/Construction% 20 Forms/Joint% 20 Check% 20 Notification% 20 Form.pdf

Letter of Intent - Form signed by the Contractor and the MBE/WBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed MBE/WBE for the amount listed at the time of bid.

http://connect.ncdot.gov/letting/LetCentral/Letter % 20 of % 20 Intent % 20 to % 20 Perform % 20 as % 20 as % 20 Subcontractor.pdf

Listing of MBE and WBE Subcontractors Form - Form for entering MBE/WBE subcontractors on a project that will meet this MBE and WBE goals. This form is for paper bids only.

http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/09%20MBE-WBE%20Subcontractors%20(State).docx

Subcontractor Quote Comparison Sheet - Spreadsheet for showing all subcontractor quotes in the work areas where MBEs and WBEs quoted on the project. This sheet is submitted with good faith effort packages.

http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote%20Comparison%20Example.xls

MBE and WBE Goal

The following goals for participation by Minority Business Enterprises and Women Business Enterprises are established for this contract:

- (A) Minority Business Enterprises 1.0 %
 - (1) If the MBE goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that MBEs participate in at least the percent of the contract as set forth above as the MBE goal.
 - (2) If the MBE goal is zero, the Contractor shall make an effort to recruit and use MBEs during the performance of the contract. Any MBE participation obtained shall be reported to the Department.

- (B) Women Business Enterprises 2.0 %
 - (1) If the WBE goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that WBEs participate in at least the percent of the contract as set forth above as the WBE goal.
 - (2) If the WBE goal is zero, the Contractor shall make an effort to recruit and use WBEs during the performance of the contract. Any WBE participation obtained shall be reported to the Department.

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as MBE and WBE certified shall be used to meet the MBE and WBE goals respectively. The Directory can be found at the following link. https://partner.ncdot.gov/VendorDirectory/default.html

The listing of an individual firm in the directory shall not be construed as an endorsement of the firm's capability to perform certain work.

Listing of MBE/WBE Subcontractors

At the time of bid, bidders shall submit <u>all</u> MBE and WBE participation that they anticipate to use during the life of the contract. Only those identified to meet the MBE goal and the WBE goal will be considered committed, even though the listing shall include both committed MBE/WBE subcontractors and additional MBE/WBE subcontractors. Any additional MBE/WBE subcontractor participation submitted at the time of bid will be used toward overall race-neutral goals. Only those firms with current MBE and WBE certification at the time of bid opening will be acceptable for listing in the bidder's submittal of MBE and WBE participation. The Contractor shall indicate the following required information:

- (A) If either the MBE or WBE goal is more than zero,
 - (1) Bidders, at the time the bid proposal is submitted, shall submit a listing of MBE/WBE participation, including the names and addresses on *Listing of MBE and WBE Subcontractors* contained elsewhere in the contract documents in order for the bid to be considered responsive. Bidders shall indicate the total dollar value of the MBE and WBE participation for the contract.
 - (2) If bidders have no MBE or WBE participation, they shall indicate this on the *Listing of MBE and WBE Subcontractors* by entering the word "None" or the number "0." This form shall be completed in its entirety. **Blank forms will not be deemed to represent zero participation.** Bids submitted that do not have MBE and WBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be rejected.

- (3) The bidder shall be responsible for ensuring that the MBE/WBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that MBE's or WBE's participation will not count towards achieving the corresponding goal.
- (B) If either the MBE or WBE goal is zero, entries on the Listing of MBE and WBE Subcontractors are not required for the zero goal, however any MBE or WBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in the special provision.

MBE or WBE Prime Contractor

When a certified MBE or WBE firm bids on a contract that contains MBE and WBE goals, the firm is responsible for meeting the goals or making good faith efforts to meet the goals, just like any other bidder. In most cases, a MBE or WBE bidder on a contract will meet one of the goals by virtue of the work it performs on the contract with its own forces. However, all the work that is performed by the MBE or WBE bidder and any other similarly certified subcontractors will count toward the goal. The MBE or WBE bidder shall list itself along with any MBE or WBE subcontractors, if any, in order to receive credit toward the goals.

For example, on a proposed contract, the WBE goal is 10%, and the MBE goal is 8%. A WBE bidder puts in a bid where they will perform 40% of the contract work and have a WBE subcontractor which will perform another 5% of the work. Together the two WBE firms submit on the *Listing of MBE and WBE Subcontractors* a value of 45% of the contract which fulfills the WBE goal. The 8% MBE goal shall be obtained through MBE participation with MBE certified subcontractors or documented through a good faith effort. It should be noted that you cannot combine the two goals to meet an overall value. The two goals shall remain separate.

MBE/WBE prime contractors shall also follow Sections A or B listed under *Listing of MBE/WBE Subcontractors* just as a non-MBE/WBE bidder would.

Written Documentation – Letter of Intent

The bidder shall submit written documentation for each MBE/WBE that will be used to meet the MBE and WBE goals of the contract, indicating the bidder's commitment to use the MBE/WBE in the contract. This documentation shall be submitted on the Department's form titled *Letter of Intent*.

The documentation shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

If the bidder fails to submit the Letter of Intent from each committed MBE and WBE to be used toward the MBE and WBE goals, or if the form is incomplete (i.e. both signatures are not present), the MBE/WBE participation will not count toward meeting the MBE/WBE goal. If the

lack of this participation drops the commitment below either the MBE or WBE goal, the Contractor shall submit evidence of good faith efforts for the goal not met, completed in its entirety, to the Engineer no later than 12:00 noon of the eighth calendar day following opening of bids, unless the eighth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

Submission of Good Faith Effort

If the bidder fails to meet or exceed either the MBE or the WBE goal, the apparent lowest responsive bidder shall submit to the Department documentation of adequate good faith efforts made to reach that specific goal(s).

One complete set and 2 copies of this information shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

Note: Where the information submitted includes repetitious solicitation letters, it will be acceptable to submit a representative letter along with a distribution list of the firms that were solicited. Documentation of MBE/WBE quotations shall be a part of the good faith effort submittal. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

Consideration of Good Faith Effort for Projects with MBE/WBE Goals More Than Zero

Adequate good faith efforts mean that the bidder took all necessary and reasonable steps to achieve the goal which, by their scope, intensity, and appropriateness, could reasonably be expected to obtain sufficient MBE/WBE participation. Adequate good faith efforts also mean that the bidder actively and aggressively sought MBE/WBE participation. Mere *pro forma* efforts are not considered good faith efforts.

The Department will consider the quality, quantity, and intensity of the different kinds of efforts a bidder has made. Listed below are examples of the types of actions a bidder will take in making a good faith effort to meet the goals and are not intended to be exclusive or exhaustive, nor is it intended to be a mandatory checklist.

(A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices, use of verifiable electronic means through the use of the NCDOT Directory of Transportation Firms) the interest of all certified MBEs/WBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within at least 10 days prior to bid opening to allow the MBEs/WBEs to respond to the solicitation. Solicitation shall provide the opportunity to MBEs/WBEs within the Division and surrounding Divisions where the project is located. The bidder must determine with certainty if the MBEs/WBEs are interested by taking appropriate steps to follow up initial solicitations.

- (B) Selecting portions of the work to be performed by MBEs/WBEs in order to increase the likelihood that the MBE and WBE goals will be achieved.
 - (1) Where appropriate, break out contract work items into economically feasible units to facilitate MBE/WBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - (2) Negotiate with subcontractors to assume part of the responsibility to meet the contract MBE/WBE goals when the work to be sublet includes potential for MBE/WBE participation (2nd and 3rd tier subcontractors).
- (C) Providing interested MBEs/WBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (D) (1) Negotiating in good faith with interested MBEs/WBEs. It is the bidder's responsibility to make a portion of the work available to MBE/WBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available MBE/WBE subcontractors and suppliers, so as to facilitate MBE/WBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of MBEs/WBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for MBEs/WBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including MBE/WBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using MBEs/WBEs is not in itself sufficient reason for a bidder's failure to meet the contract MBE or WBE goals, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidding contractors are not, however, required to accept higher quotes from MBEs/WBEs if the price difference is excessive or unreasonable.
- (E) Not rejecting MBEs/WBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (F) Making efforts to assist interested MBEs/WBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.

- (G) Making efforts to assist interested MBEs/WBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (H) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; Federal, State, and local minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of MBEs/WBEs. Contact within 7 days from the bid opening NCDOT's Business Development Manager in the Business Opportunity and Work Force Development Unit to give notification of the bidder's inability to get MBE or WBE quotes.
- (I) Any other evidence that the bidder submits which shows that the bidder has made reasonable good faith efforts to meet the MBE and WBE goal.

In addition, the Department may take into account the following:

- (1) Whether the bidder's documentation reflects a clear and realistic plan for achieving the MBE and WBE goals.
- (2) The bidders' past performance in meeting the MBE and WBE goals.
- (3) The performance of other bidders in meeting the MBE and WBE goals. For example, when the apparent successful bidder fails to meet the goals, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts the apparent successful bidder could have met the goals. If the apparent successful bidder fails to meet the MBE and WBE goals, but meets or exceeds the average MBE and WBE participation obtained by other bidders, the Department may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made a good faith effort.

If the Department does not award the contract to the apparent lowest responsive bidder, the Department reserves the right to award the contract to the next lowest responsive bidder that can satisfy to the Department that the MBE and WBE goals can be met or that an adequate good faith effort has been made to meet the MBE and WBE goals.

Non-Good Faith Appeal

The Engineer will notify the contractor verbally and in writing of non-good faith. A contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the Engineer. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

Counting MBE/WBE Participation Toward Meeting MBE/WBE Goals

(A) Participation

The total dollar value of the participation by a committed MBE/WBE will be counted toward the contract goal requirements. The total dollar value of participation by a committed MBE/WBE will be based upon the value of work actually performed by the MBE/WBE and the actual payments to MBE/WBE firms by the Contractor.

(B) Joint Checks

Prior notification of joint check use shall be required when counting MBE/WBE participation for services or purchases that involves the use of a joint check. Notification shall be through submission of Form JC-1 (*Joint Check Notification Form*) and the use of joint checks shall be in accordance with the Department's Joint Check Procedures.

(C) Subcontracts (Non-Trucking)

A MBE/WBE may enter into subcontracts. Work that a MBE subcontracts to another MBE firm may be counted toward the MBE contract goal requirement. The same holds for work that a WBE subcontracts to another WBE firm. Work that a MBE subcontracts to a non-MBE firm does <u>not</u> count toward the MBE contract goal requirement. Again, the same holds true for the work that a WBE subcontracts to a non-WBE firm. If a MBE or WBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the MBE or WBE is not performing a commercially useful function. The MBE/WBE may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption may be subject to review by the Office of Inspector General, NCDOT.

(D) Joint Venture

When a MBE or WBE performs as a participant in a joint venture, the Contractor may count toward its contract goal requirement a portion of the total value of participation with the MBE or WBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the MBE or WBE performs with its forces.

(E) Suppliers

A contractor may count toward its MBE or WBE requirement 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from a MBE or WBE regular dealer and 100 percent of such expenditures from a MBE or WBE manufacturer.

(F) Manufacturers and Regular Dealers

A contractor may count toward its MBE or WBE requirement the following expenditures to MBE/WBE firms that are not manufacturers or regular dealers:

- (1) The fees or commissions charged by a MBE/WBE firm for providing a *bona fide* service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.
- (2) With respect to materials or supplies purchased from a MBE/WBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site (but not the cost of the materials and supplies themselves), provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

Commercially Useful Function

(A) MBE/WBE Utilization

The Contractor may count toward its contract goal requirement only expenditures to MBEs and WBEs that perform a commercially useful function in the work of a contract. A MBE/WBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE/WBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a MBE/WBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the MBE/WBE credit claimed for its performance of the work, and any other relevant factors.

(B) MBE/WBE Utilization in Trucking

The following factors will be used to determine if a MBE or WBE trucking firm is performing a commercially useful function:

(1) The MBE/WBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting the MBE or WBE goal.

- (2) The MBE/WBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- (3) The MBE/WBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- (4) The MBE may subcontract the work to another MBE firm, including an owner-operator who is certified as a MBE. The same holds true that a WBE may subcontract the work to another WBE firm, including an owner-operator who is certified as a WBE. When this occurs, the MBE or WBE who subcontracts work receives credit for the total value of the transportation services the subcontracted MBE or WBE provides on the contract. It should be noted that every effort shall be made by MBE and WBE contractors to subcontract to the same certification (i.e., MBEs to MBEs and WBEs to WBEs), in order to fulfill the goal requirement. This, however, may not always be possible due to the limitation of firms in the area. If the MBE or WBE firm shows a good faith effort has been made to reach out to similarly certified transportation service providers and there is no interest or availability, and they can get assistance from other certified providers, the Engineer will not hold the prime liable for meeting the goal.
- (5) The MBE/WBE may also subcontract the work to a non-MBE/WBE firm, including from an owner-operator. The MBE/WBE who subcontracts the work to a non-MBE/WBE is entitled to credit for the total value of transportation services provided by the non-MBE/WBE subcontractor not to exceed the value of transportation services provided by MBE/WBE-owned trucks on the contract. Additional participation by non-MBE/WBE subcontractors receives credit only for the fee or commission it receives as a result of the subcontract arrangement. The value of services performed under subcontract agreements between the MBE/WBE and the Contractor will not count towards the MBE/WBE contract requirement.
- (6) A MBE/WBE may lease truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the MBE/WBE has exclusive use of and control over the truck. This requirement does not preclude the leased truck from working for others during the term of the lease with the consent of the MBE/WBE, so long as the lease gives the MBE/WBE absolute priority for use of the leased truck. This type of lease may count toward the MBE/WBE's credit as long as the driver is under the MBE/WBE's payroll.
- (7) Subcontracted/leased trucks shall display clearly on the dashboard the name of the MBE/WBE that they are subcontracted/leased to and their own company name if it is not identified on the truck itself. Magnetic door signs are not permitted.

MBE/WBE Replacement

When a Contractor has relied on a commitment to a MBE or WBE firm (or an approved substitute MBE or WBE firm) to meet all or part of a contract goal requirement, the contractor shall not terminate the MBE/WBE for convenience. This includes, but is not limited to, instances in which the Contractor seeks to perform the work of the terminated subcontractor with another MBE/WBE subcontractor, a non-MBE/WBE subcontractor, or with the Contractor's own forces or those of an affiliate. A MBE/WBE may only be terminated after receiving the Engineer's written approval based upon a finding of good cause for the termination. The prime contractor must give the MBE/WBE firm five (5) calendar days to respond to the prime contractor's notice of termination and advise the prime contractor and the Department of the reasons, if any, why the firm objects to the proposed termination of its subcontract and why the Department should not approve the action.

All requests for replacement of a committed MBE/WBE firm shall be submitted to the Engineer for approval on Form RF-1 (*Replacement Request*). If the Contractor fails to follow this procedure, the Contractor may be disqualified from further bidding for a period of up to 6 months.

The Contractor shall comply with the following for replacement of a committed MBE/WBE:

(A) Performance Related Replacement

When a committed MBE is terminated for good cause as stated above, an additional MBE that was submitted at the time of bid may be used to fulfill the MBE commitment. The same holds true if a committed WBE is terminated for good cause, an additional WBE that was submitted at the time of bid may be used to fulfill the WBE goal. A good faith effort will only be required for removing a committed MBE/WBE if there were no additional MBEs/WBEs submitted at the time of bid to cover the same amount of work as the MBE/WBE that was terminated.

If a replacement MBE/WBE is not found that can perform at least the same amount of work as the terminated MBE/WBE, the Contractor shall submit a good faith effort documenting the steps taken. Such documentation shall include, but not be limited to, the following:

- (1) Copies of written notification to MBEs/WBEs that their interest is solicited in contracting the work defaulted by the previous MBE/WBE or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with MBEs/WBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of MBEs/WBEs who were contacted.
 - (b) A description of the information provided to MBEs/WBEs regarding the plans and specifications for portions of the work to be performed.

- (3) A list of reasons why MBE/WBE quotes were not accepted.
- (4) Efforts made to assist the MBEs/WBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

(B) Decertification Replacement

- (1) When a committed MBE/WBE is decertified by the Department after the SAF (*Subcontract Approval Form*) has been received by the Department, the Department will not require the Contractor to solicit replacement MBE/WBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement.
- When a committed MBE/WBE is decertified prior to the Department receiving the SAF (*Subcontract Approval Form*) for the named MBE/WBE firm, the Contractor shall take all necessary and reasonable steps to replace the MBE/WBE subcontractor with another similarly certified MBE/WBE subcontractor to perform at least the same amount of work to meet the MBE/WBE goal requirement. If a MBE/WBE firm is not found to do the same amount of work, a good faith effort must be submitted to NCDOT (see A herein for required documentation).

Changes in the Work

When the Engineer makes changes that result in the reduction or elimination of work to be performed by a committed MBE/WBE, the Contractor will not be required to seek additional participation. When the Engineer makes changes that result in additional work to be performed by a MBE/WBE based upon the Contractor's commitment, the MBE/WBE shall participate in additional work to the same extent as the MBE/WBE participated in the original contract work.

When the Engineer makes changes that result in extra work, which has more than a minimal impact on the contract amount, the Contractor shall seek additional participation by MBEs/WBEs unless otherwise approved by the Engineer.

When the Engineer makes changes that result in an alteration of plans or details of construction, and a portion or all of the work had been expected to be performed by a committed MBE/WBE, the Contractor shall seek participation by MBEs/WBEs unless otherwise approved by the Engineer.

When the Contractor requests changes in the work that result in the reduction or elimination of work that the Contractor committed to be performed by a MBE/WBE, the Contractor shall seek additional participation by MBEs/WBEs equal to the reduced MBE/WBE participation caused by the changes.

Reports and Documentation

A SAF (*Subcontract Approval Form*) shall be submitted for all work which is to be performed by a MBE/WBE subcontractor. The Department reserves the right to require copies of actual subcontract agreements involving MBE/WBE subcontractors.

When using transportation services to meet the contract commitment, the Contractor shall submit a proposed trucking plan in addition to the SAF. The plan shall be submitted prior to beginning construction on the project. The plan shall include the names of all trucking firms proposed for use, their certification type(s), the number of trucks owned by the firm, as well as the individual truck identification numbers, and the line item(s) being performed.

Within 30 calendar days of entering into an agreement with a MBE/WBE for materials, supplies or services, not otherwise documented by the SAF as specified above, the Contractor shall furnish the Engineer a copy of the agreement. The documentation shall also indicate the percentage (60% or 100%) of expenditures claimed for MBE/WBE credit.

Reporting Minority and Women Business Enterprise Participation

The Contractor shall provide the Engineer with an accounting of payments made to all MBE and WBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:

- (A) Withholding of money due in the next partial pay estimate; or
- (B) Removal of an approved contractor from the prequalified bidders' list or the removal of other entities from the approved subcontractors list.

While each contractor (prime, subcontractor, 2nd tier subcontractor) is responsible for accurate accounting of payments to MBEs/WBEs, it shall be the prime contractor's responsibility to report all monthly and final payment information in the correct reporting manner.

Failure on the part of the Contractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from further bidding until the required information is submitted.

Failure on the part of any subcontractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from being approved for further work on future projects until the required information is submitted.

Contractors reporting transportation services provided by non-MBE/WBE lessees shall evaluate the value of services provided during the month of the reporting period only.

At any time, the Engineer can request written verification of subcontractor payments.

The Contractor shall report the accounting of payments through the Department's DBE Payment Tracking System.

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the 2012 Standard Specifications may be cause to disqualify the Contractor.

SUBSURFACE INFORMATION:

(7-1-95) 450 SP1 G112 A

There is **no** subsurface information available on this project. The Contractor shall make his own investigation of subsurface conditions.

LOCATING EXISTING UNDERGROUND UTILITIES:

3-20-12) 105 SPI G115

Revise the 2012 Standard Specifications as follows:

Page 1-43, Article 105-8, line 28, after the first sentence, add the following:

Identify excavation locations by means of pre-marking with white paint, flags, or stakes or provide a specific written description of the location in the locate request.

RESOURCE CONSERVATION AND ENV. SUSTAINABLE PRACTICES:

(5-21-13) (Rev. 5-19-15) 104-13 SPI G118

In accordance with North Carolina Executive Order 156, NCGS 130A-309.14(3), and NCGS 136-28.8, it is the objective of the Department to aid in the reduction of materials that become a part of our solid waste stream, to divert materials from landfills, to find ways to recycle and reuse materials, to consider and minimize, where economically feasible, the environmental impacts associated with agency land use and acquisition, construction, maintenance and facility management for the benefit of the Citizens of North Carolina.

To achieve the mission of reducing environmental impacts across the state, the Department is committed to supporting the efforts to initiate, develop and use products and construction methods that incorporate the use of recycled, solid waste products and environmentally sustainable practices in accordance with Article 104-13 of the *Standard Specifications*.

Report the quantities of reused or recycled materials either incorporated in the project or diverted from landfills and any practice that minimizes the environmental impact on the project annually on the Project Construction Reuse and Recycling Reporting Form. The Project Construction Reuse and Recycling Reporting Form and a location tool for local recycling facilities are available at:

 $\frac{http://connect.ncdot.gov/resources/Environmental/Pages/North-Carolina-Recycling-Locations.aspx.}{Locations.aspx.}$

Submit the Project Construction Reuse and Recycling Reporting Form by August 1 annually to <u>valuemanagementunit@ncdot.gov</u>. For questions regarding the form or reporting, please contact the State Value Management Engineer at 919-707-4810.

DOMESTIC STEEL:

(4-16-13) 106 SPI G120

Revise the 2012 Standard Specifications as follows:

Page 1-49, Subarticle 106-1(B) Domestic Steel, lines 2-7, replace the first paragraph with the following:

All steel and iron products that are permanently incorporated into this project shall be produced in the United States except minimal amounts of foreign steel and iron products may be used provided the combined material cost of the items involved does not exceed 0.1% of the total amount bid for the entire project or \$2,500, whichever is greater. If invoices showing the cost of the material are not provided, the amount of the bid item involving the foreign material will be used for calculations. This minimal amount of foreign produced steel and iron products permitted for use is not applicable to high strength fasteners. Domestically produced high strength fasteners are required.

OUTSOURCING OUTSIDE THE USA:

(9-21-04) (Rev. 5-16-06) SPI GI50

All work on consultant contracts, services contracts, and construction contracts shall be performed in the United States of America. No work shall be outsourced outside of the United States of America.

Outsourcing for the purpose of this provision is defined as the practice of subcontracting labor, work, services, staffing, or personnel to entities located outside of the United States.

The North Carolina Secretary of Transportation shall approve exceptions to this provision in writing.

GIFTS FROM VENDORS AND CONTRACTORS:

(12-15-09) 107-1 SPI G152

By Executive Order 24, issued by Governor Perdue, and *N.C.G.S.*§ 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who:

- (A) Have a contract with a governmental agency; or
- (B) Have performed under such a contract within the past year; or
- (C) Anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and N.C.G.S. § 133-32.

Executive Order 24 also encouraged and invited other State Agencies to implement the requirements and prohibitions of the Executive Order to their agencies. Vendors and contractors should contact other State Agencies to determine if those agencies have adopted Executive Order 24.

LIABILITY INSURANCE:

(5-20-14)

SP1 G160

Revise the 2012 Standard Specifications as follows:

Page 1-60, Article 107-15 LIABILITY INSURANCE, line 16, add the following as the second sentence of the third paragraph:

Prior to beginning services, all contractors shall provide proof of coverage issued by a workers' compensation insurance carrier, or a certificate of compliance issued by the Department of Insurance for self-insured subcontractors, irrespective of whether having regularly in service fewer than three employees.

EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION: (1-16-07) (Rev 9-18-12) 105-16, 225-2, 16

SP1 G180

General

Schedule and conduct construction activities in a manner that will minimize soil erosion and the resulting sedimentation and turbidity of surface waters. Comply with the requirements herein regardless of whether or not a National Pollution discharge Elimination System (NPDES) permit for the work is required.

Establish a chain of responsibility for operations and subcontractors' operations to ensure that the Erosion and Sediment Control/Stormwater Pollution Prevention Plan is implemented and maintained over the life of the contract.

- (A) Certified Supervisor - Provide a certified Erosion and Sediment Control/Stormwater Supervisor to manage the Contractor and subcontractor operations, insure compliance with Federal, State and Local ordinances and regulations, and manage the Quality Control Program.
- (B) Certified Foreman - Provide a certified, trained foreman for each construction operation that increases the potential for soil erosion or the possible sedimentation and turbidity of surface waters.
- (C) Certified Installer - Provide a certified installer to install or direct the installation for erosion or sediment/stormwater control practices.

(D) Certified Designer - Provide a certified designer for the design of the erosion and sediment control/stormwater component of reclamation plans and, if applicable, for the design of the project erosion and sediment control/stormwater plan.

Roles and Responsibilities

- (A) Certified Erosion and Sediment Control/Stormwater Supervisor The Certified Supervisor shall be Level II and responsible for ensuring the erosion and sediment control/stormwater plan is adequately implemented and maintained on the project and for conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours notice from initial exposure of an erodible surface to the project's final acceptance. Perform the following duties:
 - (1) Manage Operations Coordinate and schedule the work of subcontractors so that erosion and sediment control/stormwater measures are fully executed for each operation and in a timely manner over the duration of the contract.
 - (a) Oversee the work of subcontractors so that appropriate erosion and sediment control/stormwater preventive measures are conformed to at each stage of the work.
 - (b) Prepare the required National Pollutant Discharge Elimination System (NPDES) Inspection Record and submit to the Engineer.
 - (c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
 - (d) Implement the erosion and sediment control/stormwater site plans requested.
 - (e) Provide any needed erosion and sediment control/stormwater practices for the Contractor's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
 - (f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Contractor in jurisdictional areas.
 - (g) Conduct all erosion and sediment control/stormwater work in a timely and workmanlike manner.
 - (h) Fully perform and install erosion and sediment control/stormwater work prior to any suspension of the work.
 - (i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control/stormwater issues due to the Contractor's operations.
 - (j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces or any location where sediment leaves the Right-of-Way.
 - (k) Have available a set of erosion and sediment control/stormwater plans that are initialed and include the installation date of Best Management Practices. These practices shall include temporary and permanent groundcover and be properly updated to reflect necessary plan and field

changes for use and review by Department personnel as well as regulatory agencies.

- (2) Requirements set forth under the NPDES Permit The Department's NPDES Stormwater permit (NCS000250) outlines certain objectives and management measures pertaining to construction activities. The permit references NCG010000, General Permit to Discharge Stormwater under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated Erosion and Sediment Control Program for construction activities disturbing one or more acres of land. The Department further incorporates these requirements on all contracted bridge and culvert work at jurisdictional waters, regardless of size. Some of the requirements are, but are not limited to:
 - (a) Control project site waste to prevent contamination of surface or ground waters of the state, i.e. from equipment operation/maintenance, construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste.
 - (b) Inspect erosion and sediment control/stormwater devices and stormwater discharge outfalls at least once every 7 calendar days, twice weekly for construction related *Federal Clean Water Act, Section 303(d)* impaired streams with turbidity violations, and within 24 hours after a significant rainfall event of 0.5 inch that occurs within a 24 hour period.
 - (c) Maintain an onsite rain gauge or use the Department's Multi-Sensor Precipitation Estimate website to maintain a daily record of rainfall amounts and dates.
 - (d) Maintain erosion and sediment control/stormwater inspection records for review by Department and Regulatory personnel upon request.
 - (e) Implement approved reclamation plans on all borrow pits, waste sites and staging areas.
 - (f) Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.
 - (g) Provide secondary containment for bulk storage of liquid materials.
 - (h) Provide training for employees concerning general erosion and sediment control/stormwater awareness, the Department's NPDES Stormwater Permit NCS000250 requirements, and the applicable requirements of the *General Permit, NCG010000*.
 - (i) Report violations of the NPDES permit to the Engineer immediately who will notify the Division of Water Quality Regional Office within 24 hours of becoming aware of the violation.
- (3) Quality Control Program Maintain a quality control program to control erosion, prevent sedimentation and follow provisions/conditions of permits. The quality control program shall:
 - (a) Follow permit requirements related to the Contractor and subcontractors' construction activities.

- (b) Ensure that all operators and subcontractors on site have the proper erosion and sediment control/stormwater certification.
- (c) Notify the Engineer when the required certified erosion and sediment control/stormwater personnel are not available on the job site when needed.
- (d) Conduct the inspections required by the NPDES permit.
- (e) Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.
- (f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.
- (g) Use flocculants approved by state regulatory authorities where appropriate and where required for turbidity and sedimentation reduction.
- (h) Ensure proper installation and maintenance of temporary erosion and sediment control devices.
- (i) Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.
- (j) The Contractor's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records and make records available at all times for verification by the Engineer.
- (B) *Certified Foreman* At least one Certified Foreman shall be onsite for each type of work listed herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:
 - (1) Foreman in charge of grading activities
 - (2) Foreman in charge of bridge or culvert construction over jurisdictional areas
 - (3) Foreman in charge of utility activities

The Contractor may request to use the same person as the Level II Supervisor and Level II Foreman. This person shall be onsite whenever construction activities as described above are taking place. This request shall be approved by the Engineer prior to work beginning.

The Contractor may request to name a single Level II Foreman to oversee multiple construction activities on small bridge or culvert replacement projects. This request shall be approved by the Engineer prior to work beginning.

- (C) *Certified Installers* Provide at least one onsite, Level I Certified Installer for each of the following erosion and sediment control/stormwater crew:
 - (1) Seeding and Mulching
 - (2) Temporary Seeding
 - (3) Temporary Mulching
 - (4) Sodding
 - (5) Silt fence or other perimeter erosion/sediment control device installations
 - (6) Erosion control blanket installation

- (7) Hydraulic tackifier installation
- (8) Turbidity curtain installation
- (9) Rock ditch check/sediment dam installation
- (10) Ditch liner/matting installation
- (11) Inlet protection
- (12) Riprap placement
- (13) Stormwater BMP installations (such as but not limited to level spreaders, retention/detention devices)
- (14) Pipe installations within jurisdictional areas

If a Level I *Certified Installer* is not onsite, the Contractor may substitute a Level II Foreman for a Level I Installer, provided the Level II Foreman is not tasked to another crew requiring Level II Foreman oversight.

(D) Certified Designer - Include the certification number of the Level III Certified Designer on the erosion and sediment control/stormwater component of all reclamation plans and if applicable, the certification number of the Level III Certified Designer on the design of the project erosion and sediment control/stormwater plan.

Preconstruction Meeting

Furnish the names of the Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers and Certified Designer and notify the Engineer of changes in certified personnel over the life of the contract within 2 days of change.

Ethical Responsibility

Any company performing work for the North Carolina Department of Transportation has the ethical responsibility to fully disclose any reprimand or dismissal of an employee resulting from improper testing or falsification of records.

Revocation or Suspension of Certification

Upon recommendation of the Chief Engineer to the certification entity, certification for Supervisor, Certified Foremen, Certified Installers and Certified Designer may be revoked or suspended with the issuance of an Immediate Corrective Action (ICA), Notice of Violation (NOV), or Cease and Desist Order for erosion and sediment control/stormwater related issues.

The Chief Engineer may recommend suspension or permanent revocation of certification due to the following:

- (A) Failure to adequately perform the duties as defined within this certification provision.
- (B) Issuance of an ICA, NOV, or Cease and Desist Order.
- (C) Failure to fully perform environmental commitments as detailed within the permit conditions and specifications.
- (D) Demonstration of erroneous documentation or reporting techniques.

- (E) Cheating or copying another candidate's work on an examination.
- (F) Intentional falsification of records.
- (G) Directing a subordinate under direct or indirect supervision to perform any of the above actions.
- (H) Dismissal from a company for any of the above reasons.
- (I) Suspension or revocation of one's certification by another entity.

Suspension or revocation of a certification will be sent by certified mail to the certificant and the Corporate Head of the company that employs the certificant.

A certificant has the right to appeal any adverse action which results in suspension or permanent revocation of certification by responding, in writing, to the Chief Engineer within 10 calendar days after receiving notice of the proposed adverse action.

Chief Engineer 1536 Mail Service Center Raleigh, NC 27699-1536

Failure to appeal within 10 calendar days will result in the proposed adverse action becoming effective on the date specified on the certified notice. Failure to appeal within the time specified will result in a waiver of all future appeal rights regarding the adverse action taken. The certificant will not be allowed to perform duties associated with the certification during the appeal process.

The Chief Engineer will hear the appeal and make a decision within 7 days of hearing the appeal. Decision of the Chief Engineer will be final and will be made in writing to the certificant.

If a certification is temporarily suspended, the certificant shall pass any applicable written examination and any proficiency examination, at the conclusion of the specified suspension period, prior to having the certification reinstated.

Measurement and Payment

Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers and Certified Designer will be incidental to the project for which no direct compensation will be made.

PROCEDURE FOR MONITORING BORROW PIT DISCHARGE:

(2-20-07) (Rev. 3-19-13) 105-16, 230, 801

Water discharge from borrow pit sites shall not cause surface waters to exceed 50 NTUs (nephelometric turbidity unit) in streams not designated as trout waters and 10 NTUs in streams, lakes or reservoirs designated as trout waters. For lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTUs. If the turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased.

SP1 G181

If during any operating day, the downstream water quality exceeds the standard, the Contractor shall do all of the following:

- (A) Either cease discharge or modify the discharge volume or turbidity levels to bring the downstream turbidity levels into compliance, or
- (B) Evaluate the upstream conditions to determine if the exceedance of the standard is due to natural background conditions. If the background turbidity measurements exceed the standard, operation of the pit and discharge can continue as long as the stream turbidity levels are not increased due to the discharge.
- (C) Measure and record the turbidity test results (time, date and sampler) at all defined sampling locations 30 minutes after startup and at a minimum, one additional sampling of all sampling locations during that 24-hour period in which the borrow pit is discharging.
- (D) Notify DWQ within 24 hours of any stream turbidity standard exceedances that are not brought into compliance.

During the Environmental Assessment required by Article 230-4 of the 2012 Standard Specifications, the Contractor shall define the point at which the discharge enters into the State's surface waters and the appropriate sampling locations. Sampling locations shall include points upstream and downstream from the point at which the discharge enters these waters. Upstream sampling location shall be located so that it is not influenced by backwater conditions and represents natural background conditions. Downstream sampling location shall be located at the point where complete mixing of the discharge and receiving water has occurred.

The discharge shall be closely monitored when water from the dewatering activities is introduced into jurisdictional wetlands. Any time visible sedimentation (deposition of sediment) on the wetland surface is observed, the dewatering activity will be suspended until turbidity levels in the stilling basin can be reduced to a level where sediment deposition does not occur. Staining of wetland surfaces from suspended clay particles, occurring after evaporation or infiltration, does not constitute sedimentation. No activities shall occur in wetlands that adversely affect the functioning of a wetland. Visible sedimentation will be considered an indication of possible adverse impacts on wetland use.

The Engineer will perform independent turbidity tests on a random basis. These results will be maintained in a log within the project records. Records will include, at a minimum, turbidity test results, time, date and name of sampler. Should the Department's test results exceed those of the Contractor's test results, an immediate test shall be performed jointly with the results superseding the previous test results of both the Department and the Contractor.

The Contractor shall use the NCDOT Turbidity Reduction Options for Borrow Pits Matrix, available at http://www.ncdot.gov/doh/operations/dp-chief_eng/roadside/fieldops/downloads/Files/TurbidityReductionOptionSheet.pdf to plan, design, construct, and maintain BMPs to address water quality standards. Tier I Methods include stilling basins which are standard compensatory BMPs. Other Tier I methods are noncompensatory and shall be used when needed to meet the stream turbidity standards. Tier II Methods are also noncompensatory and are options that may be needed for protection of rare or unique resources or where special environmental conditions exist at the site which have led to additional requirements being placed

in the DWQ's 401 Certifications and approval letters, Isolated Wetland Permits, Riparian Buffer Authorization or a DOT Reclamation Plan's Environmental Assessment for the specific site. Should the Contractor exhaust all Tier I Methods on a site exclusive of rare or unique resources or special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

The Contractor may use cation exchange capacity (CEC) values from proposed site borings to plan and develop the bid for the project. CEC values exceeding 15 milliequivalents per 100 grams of soil may indicate a high potential for turbidity and should be avoided when dewatering into surface water is proposed.

No additional compensation for monitoring borrow pit discharge will be paid.

EMPLOYMENT:

(11-15-11) (Rev. 1-17-12) 108, 102 SPI G184

Revise the 2012 Standard Specifications as follows:

Page 1-20, Subarticle 102-15(O), delete and replace with the following:

(O) Failure to restrict a former Department employee as prohibited by Article 108-5.

Page 1-65, Article 108-5 Character of Workmen, Methods, and Equipment, line 32, delete all of line 32, the first sentence of the second paragraph and the first word of the second sentence of the second paragraph.

STATE HIGHWAY ADMINISTRATOR TITLE CHANGE:

(/-10-12)

SP1 G185

Revise the 2012 Standard Specifications as follows:

Replace all references to "State Highway Administrator" with "Chief Engineer".

SUBLETTING OF CONTRACT:

(11-18-2014) 108-6 SPI G186

Revise the 2012 Standard Specifications as follows:

Page 1-66, Article 108-6 Subletting of Contract, line 37, add the following as the second sentence of the first paragraph:

All requests to sublet work shall be submitted within 30 days of the date of availability or prior to expiration of 20% of the contract time, whichever date is later, unless otherwise approved by the Engineer.

Page 1-67, Article 108-6 Subletting of Contract, line 7, add the following as the second sentence of the fourth paragraph:

Purchasing materials for subcontractors is not included in the percentage of work required to be performed by the Contractor. If the Contractor sublets items of work but elects to purchase

material for the subcontractor, the value of the material purchased will be included in the total dollar amount considered to have been sublet.

DIVISION LET CONTRACT PREQUALIFICATION:

(07-01-14)(6-1-15)

Any firm that wishes to bid as a prime contractor shall be prequalified as a Bidder or PO Prime Contractor prior to submitting a bid. Information regarding prequalification can be found at: https://connect.ncdot.gov/business/Prequal/Pages/default.aspx.

In addition, the prime contractor and/or subcontractor(s) shall be prequalified in the work code(s) for which they identify as work items in the prime contractor's construction progress schedule that they will complete themselves. Any contractor identified as working outside their expertise may be considered in default of contract.

CONTRACT PAYMENT AND PERFORMANCE BOND:

(01-30-14) 102-8, 102-10 SPD 01-420

A performance bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the faithful performance of the contract in accordance with specifications and conditions of the contract is required for contracts of \$500,000 or more. Such bond shall be solely for the protection of the North Carolina Department of Transportation and the State of North Carolina.

A payment bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the prompt payment for all labor or materials for which the Contractor, or his subcontractors, are liable is required for Construction contracts greater than \$500,000. The payment bond shall be solely for the protection of persons or firms furnishing materials or performing labor for this contract for which the Contractor is liable.

The successful bidder, within fourteen (14) days after notice of award, shall provide the Department with a contract payment bond and a contract performance bond each in an amount equal to 100 percent of the amount of the contract.

PROJECT SPECIAL PROVISIONS

ROADWAY

Contractor shall not begin the SR 1326 (Pea Ridge Rd) realignment until April 18, 2016.

Coordination meetings, between NCDOT, the Contractor, and the Tryon International Equestrian Center representative, shall occur weekly, for the duration of the project.

CLEARING AND GRUBBING - METHOD II:

(9-17-02) (Rev.8-18-15)

200

SP2 R02A

Perform clearing on this project to the limits established by Method "II" shown on Standard Drawing No. 200.02 of the 2012 Roadway Standard Drawings. Conventional clearing methods may be used except where permit drawings or conditions have been included in the proposal which require certain areas to be cleared by hand methods.

SHOULDER RECONSTRUCTION:

(10/10/2013)

RR 07Rev

Description

The Contractor shall place (Incidental Stone Base) along the completed edge of pavement and construct shoulders as shown on the sketch map and/or as directed by the Engineer. The area shall be backfilled and compacted to the satisfaction of the Engineer.

Materials

The (Incidental Stone Base) shall meet the requirements of Section 545 in the NCDOT 2012 Standard Specifications for Roads and Structures.

Gradation and Acceptance

Acceptance of graded stone material will be made by visual inspection and approval by the project Engineer as being satisfactory for the purpose of *Shoulder Reconstruction*. No sampling or testing of graded stone material will be performed.

Measurement and Payment

Shoulder Reconstruction will be measured along the edge of each shoulder. Measurement will be made to the nearest 0.01 of a mile. Such price and payment will be full compensation for furnishing (Incidental Stone Base), hauling, placing, compaction, and all incidentals necessary to complete construction of the shoulders.

Payment will be made under:

Pay Item
Shoulder Reconstruction

Pay Unit Shoulder Mile

PIPE INSTALLATION:

(11-20-12) (Rev. 8-18-15) 300 SP3 R01

Revise the 2012 Standard Specifications as follows:

Page 3-1, Article 300-2, Materials, line 15, in the materials table, replace "Flowable Fill" and "Geotextiles" with the following:

Item	Section
Flowable Fill, Excavatable	1000-6
Grout, Type 2	1003
Geotextiles, Type 4	1056

Page 3-1, Article 300-2, Materials, lines 23-24, replace sentence with the following:

Provide foundation conditioning geotextile and geotextile to wrap pipe joints in accordance with Section 1056 for Type 4 geotextile.

Page 3-3, Subarticle 300-6(A), Rigid Pipe, line 2, in the first paragraph, replace "an approved non-shrink grout." with "grout." and line 4, in the second paragraph, replace "filtration geotextile" with "geotextile".

Page 3-3, Article 300-7, Backfilling, lines 37-38, in the first and second sentences of the fifth paragraph, replace "Excavatable flowable fill" with "Flowable fill".

FLOWABLE FILL:

(9-17-02) (Rev 1-17-12)

300, 340, 450, 1000, 1530, 1540, 1550

SP3 R30

Description

This work consists of all work necessary to place flowable fill in accordance with these provisions, the plans, and as directed.

Materials

Refer to Division 10 of the 2012 Standard Specifications.

Item	Section
Flowable Fill	1000-6

Construction Methods

Discharge flowable fill material directly from the truck into the space to be filled, or by other approved methods. The mix may be placed full depth or in lifts as site conditions dictate. The Contractor shall provide a method to plug the ends of the existing pipe in order to contain the flowable fill.

Measurement and Payment

At locations where flowable fill is called for on the plans and a pay item for flowable fill is included in the contract, *Flowable Fill* will be measured in cubic yards and paid as the actual number of cubic yards that have been satisfactorily placed and accepted. Such price and payment will be full compensation for all work covered by this provision including, but not limited to, the mix design, furnishing, hauling, placing and containing the flowable fill.

Payment will be made under:

Pay ItemPay UnitFlowable FillCubic Yard

ASPHALT PAVEMENTS - SUPERPAVE:

(6-19-12) (Rev. 1-19-16) 605, 609, 610, 650

SP6 R01

Revise the 2012 Standard Specifications as follows:

Page 6-3, Article 605-7, APPLICATION RATES AND TEMPERATURES, replace this article, including Table 605-1, with the following:

Apply tack coat uniformly across the existing surface at target application rates shown in Table 605-1.

TABLE (APPLICATION RATES	
Eviating Surface	Target Rate (gal/sy)
Existing Surface	Emulsified Asphalt
New Asphalt	0.04 ± 0.01
Oxidized or Milled Asphalt	0.06 ± 0.01
Concrete	0.08 ± 0.01

Apply tack coat at a temperature within the ranges shown in Table 605-2. Tack coat shall not be overheated during storage, transport or at application.

	E 605-2 ATURE FOR TACK COAT
Asphalt Material	Temperature Range
Asphalt Binder, Grade PG 64-22	350 - 400°F
Emulsified Asphalt, Grade RS-1H	130 - 160°F
Emulsified Asphalt, Grade CRS-1	130 - 160°F
Emulsified Asphalt, Grade CRS-1H	130 - 160°F
Emulsified Asphalt, Grade HFMS-1	130 - 160°F
Emulsified Asphalt, Grade CRS-2	130 - 160°F

Page 6-7, Article 609-3, FIELD VERIFICATION OF MIXTURE AND JOB MIX FORMULA ADJUSTMENTS, lines 35-37, delete the second sentence of the second paragraph.

Page 6-18, Article 610-1 DESCRIPTION, lines 40-41, delete the last sentence of the last paragraph.

Page 6-19, Subarticle 610-3(A), Mix Design-General, line 5, add the following as the first paragraph:

Warm mix asphalt (WMA) is allowed for use at the Contractor's option in accordance with the NCDOT Approved Products List for WMA Technologies available at:

 $\frac{https://connect.ncdot.gov/resources/Materials/MaterialsResources/Warm\%20}{Mix\%20Asphalt\%20Approved\%20List.pdf}$

Page 6-20, Subarticle 610-3(C), Job Mix Formula (JMF), lines 47-48, replace the last sentence of the third paragraph with the following:

The JMF mix temperature shall be within the ranges shown in Table 610-1 unless otherwise approved.

Page 6-21, Subarticle 610-3(C) Job Mix Formula (JMF), replace Table 610-1 with the following:

	E 610-1 AT THE ASPHALT PLANT
Binder Grade	JMF Mix Temperature
PG 58-28; PG 64-22	250 - 290°F
PG 70-22	275- 305°F
PG 76-22	300- 325°F

Page 6-21, Subarticle 610-3(C) Job Mix Formula (JMF), lines 1-2, in the first sentence of the first paragraph, delete "and compaction". Lines 4-7, delete the second paragraph and replace with the following:

When RAS is used, the JMF mix temperature shall be established at 275°F or higher.

Page 6-22, Article 610-4, WEATHER, TEMPERATURE AND SEASONAL LIMITATIONS FOR PRODUCING AND PLACING ASPHALT MIXTURES, lines 15-17, replace the second sentence of the first paragraph with the following:

Do not place asphalt material when the air or surface temperatures, measured at the location of the paving operation away from artificial heat, do not meet Table 610-5.

Page 6-23, Article 610-4, WEATHER, TEMPERATURE AND SEASONAL LIMITATIONS FOR PRODUCING AND PLACING ASPHALT MIXTURES, replace Table 610-5 with the following:

	BLE 610-5 ERATURES FOR ASPHALT
Asphalt Concrete Mix Type	Minimum Surface and Air Temperature
B25.0B, C	35°F
I19.0B, C, D	35°F
SF9.5A, S9.5B	40°F ^A
S9.5C, S12.5C	45°F ^A
S9.5D, S12.5D	50°F

A. For the final layer of surface mixes containing recycled asphalt shingles (RAS), the minimum surface and air temperature shall be 50°F.

Page 6-23, Subarticle 610-5(A), General, lines 33-34, replace the last sentence of the third paragraph with the following:

Produce the mixture at the asphalt plant within ± 25 °F of the JMF mix temperature. The temperature of the mixture, when discharged from the mixer, shall not exceed 350°F.

Page 6-26, Article 610-7, HAULING OF ASPHALT MIXTURE, lines 22-23, in the fourth sentence of the first paragraph replace "so as to overlap the top of the truck bed and" with "to". Line 28, in the last paragraph, replace "+15 °F to -25 °F of the specified JMF temperature." with "±25 °F of the specified JMF mix temperature."

Page 6-26, Article 610-8, SPREADING AND FINISHING, line 34, add the following new paragraph:

As referenced in Section 9.6.3 of the *HMA/QMS Manual*, use the automatic screed controls on the paver to control the longitudinal profile. Where approved by the Engineer, the Contractor has the option to use either a fixed or mobile string line.

Page 6-29, Article 610-13, FINAL SURFACE TESTING AND ACCEPTANCE, line 39, add the following after the first sentence in the first paragraph:

Smoothness acceptance testing using the inertial profiler is not required on ramps, loops and turn lanes.

Page 6-30, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 15-16, replace the fourth sentence of the fourth paragraph with the following:

The interval at which relative profile elevations are reported shall be 2".

Page 6-30, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 25-28, replace the ninth paragraph with the following:

Operate the profiler at any speed as per the manufacturer's recommendations to collect valid data.

Page 6-30, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 30-31, delete the third sentence of the tenth paragraph.

Page 6-31, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 11-13, replace the first sentence of the third paragraph with the following:

After testing, transfer the profile data from the profiler portable computer's hard drive to a write once storage media (Flash drive, USB, DVD-R or CD-R) or electronic media approved by the Engineer.

Page 6-31, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 17-18, replace the first sentence of the fourth paragraph with the following:

Submit a report with the documentation and electronic data of the evaluation for each section to the Engineer within 10 days after completion of the smoothness testing. The report shall be in the tabular format for each 0.10 segment or a portion thereof with a summary of the MRI values and the localized roughness areas including corresponding project station numbers or acceptable reference points. Calculate the pay adjustments for all segments in accordance with the formulas in Sections (1) and (2) shown below. The Engineer shall review and approval all pay adjustments unless corrective action is required.

Page 6-31, Subarticle 610-13(A)(1), Acceptance for New Construction, lines 36-37, replace the third paragraph with the following:

The price adjustment will apply to each 0.10-mile section or prorated for a portion thereof, based on the Mean Roughness Index (MRI), the average IRI values from both wheel paths.

Page 6-32, Subarticle 610-13(A)(2), Localized Roughness, lines 12-16, replace the first paragraph with the following:

Areas of localized roughness shall be identified through the "Smoothness Assurance Module (SAM)" provided in the ProVAL software. Use the SAM report to optimize repair strategies by analyzing the measurements from profiles collected using inertial profilers. The ride quality threshold for localized roughness shall be 165 in/mile for any sections that are 15 ft. to 100 ft. in length at the continuous short interval of 25 ft. Submit a continuous roughness report to identify each section with project station numbers or reference points outside the threshold and identify all localized roughness, with the signature of the Operator included with the submitted IRI trace and electronic files.

Page 6-32, Subarticle 610-13(A)(2), Localized Roughness, line 21, add the following new paragraph:

If the Engineer does not require corrective action, the pay adjustment for each area of localized roughness shall be based on the following formula:

PA = (165 - LR#) 5

Where:

PA = Pay Adjustment (dollars)

LR# = The Localized Roughness number determined from SAM report

for the ride quality threshold

Page 6-41, Subarticle 650-3(B), Mix Design Criteria, replace Table 650-1 with the following:

	OGAFC GRADAT	ION CRITERIA	
Sieve Size (mm)	Type FC-1	Type FC-1 Modified	Type FC-2 Modified
19.0	-	-	100
12.5	100	100	80 - 100
9.50	75 - 100	75 - 100	55 - 80
4.75	25 - 45	25 - 45	15 - 30
2.36	5 - 15	5 - 15	5 - 15
0.075	1.0 - 3.0	1.0 - 3.0	2.0 - 4.0

SHOULDER WEDGE:

(9-20-11) (Rev. 8-21-12) 610 SP6 R03R

Revise the 2012 Standard Specifications as follows:

Page 6-26, Article 610-8, add the following after line 43:

Attach a device, mounted on screed of paving equipment, capable of constructing a shoulder wedge with an angle of 30 degrees plus or minus 4 degrees along the outside edge of the roadway, measured from the horizontal plane in place after final compaction on the final surface course. Use an approved mechanical device which will form the asphalt mixture to produce a wedge with uniform texture, shape and density while automatically adjusting to varying heights.

Payment for use of this device will be incidental to the other pay items in the contract.

ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES:

(11-21-00) (Rev. 7-17-12) 609

SP6 R15

The approximate asphalt binder content of the asphalt concrete plant mixtures used on this project will be as follows:

Asphalt Concrete Base Course	Type B 25.0	4.4%
Asphalt Concrete Intermediate Course	Type I 19.0	4.8%
Asphalt Concrete Surface Course	Type S 4.75A	6.8%
Asphalt Concrete Surface Course	Type SA-1	6.8%
Asphalt Concrete Surface Course	Type SF 9.5A	6.7%
Asphalt Concrete Surface Course	Type S 9.5	6.0%
Asphalt Concrete Surface Course	Type S 12.5	5.6%

The actual asphalt binder content will be established during construction by the Engineer within the limits established in the 2012 Standard Specifications.

ASPHALT PLANT MIXTURES:

(7-1-95) 609 SP6 R20

Place asphalt concrete base course material in trench sections with asphalt pavement spreaders made for the purpose or with other equipment approved by the Engineer.

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

(11-21-00) 620 SP6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2012 Standard Specifications.

The base price index for asphalt binder for plant mix is \$ 366.43 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **February 1, 2015**.

ADJUSTMENT OF MANHOLES, METER BOXES, AND VALVE BOXES:

(7-1-95) (Rev. 8-21-12)

858

SP8 R97R

The Contractor's attention is directed to Article 858-3 of the 2012 Standard Specifications. Cast iron or steel fittings will not be permitted for the adjustment of manholes, meter boxes, and valve boxes on this project.

GUARDRAIL ANCHOR UNITS, TYPE 350 (TL-3):

(4-20-04) (Rev. 7-21-15)

862

SP08 R065

Description

Furnish and install guardrail anchor units in accordance with the details in the plans, the applicable requirements of Section 862 of the 2012 Standard Specifications, and at locations shown in the plans.

Materials

Furnish guardrail anchor units listed on the NCDOT <u>Approved Products List</u> at https://apps.dot.state.nc.us/vendor/approvedproducts/ or approved equal.

Prior to installation the Contractor shall submit to the Engineer:

- (A) FHWA acceptance letter for each guardrail anchor unit certifying it meets the requirements of NCHRP Report 350, Test Level 3, in accordance with Article 106-2 of the 2012 Standard Specifications.
- (B) Certified working drawings and assembling instructions from the manufacturer for each guardrail anchor unit in accordance with Article 105-2 of the 2012 Standard Specifications.

No modifications shall be made to the guardrail anchor unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans, and details and assembling instructions furnished by the manufacturer.

Construction Methods

Guardrail end delineation is required on all approach and trailing end sections for both temporary and permanent installations. Guardrail end delineation consists of yellow reflective sheeting applied to the entire end section of the guardrail in accordance with Article 1088-3 of the 2012 Standard Specifications and is incidental to the cost of the guardrail anchor unit.

Measurement and Payment

Measurement and payment will be made in accordance with Article 862-6 of the 2012 Standard Specifications.

Payment will be made under:

Pay ItemPay UnitGuardrail Anchor Units, Type 350Each

MATERIALS:

(2-21-12) (Rev. 3-15-16) 1000, 1002, 1005, 1016, 1018, 1024, 1050, 1074, 1078, 1080, 1081, 1086, 1084, 1087, 1092 SP10 R01 Revise the 2012 Standard Specifications as follows:

Page 10-1, Article 1000-1, DESCRIPTION, lines 9-10, replace the last sentence of the first paragraph with the following:

Type IL, IP, IS or IT blended cement may be used instead of Portland cement.

Page 10-1, Article 1000-1, DESCRIPTION, line 14, add the following:

If any change is made to the mix design, submit a new mix design (with the exception of an approved pozzolan source change).

If any major change is made to the mix design, also submit new test results showing the mix design conforms to the criteria. Define a major change to the mix design as:

- (1) A source change in coarse aggregate, fine aggregate or cement.
- (2) A pozzolan class or type change (e.g. Class F fly ash to Class C fly ash).
- (3) A quantitative change in coarse aggregate (applies to an increase or decrease greater than 5%), fine aggregate (applies to an increase or decrease greater than 5%), water (applies to an increase only), cement (applies to a decrease only), or pozzolan (applies to an increase or decrease greater than 5%).

Use materials which do not produce a mottled appearance through rusting or other staining of the finished concrete surface.

Page 10-1, Article 1000-2, MATERIALS, line 16; Page 10-8, Subarticle 1000-7(A), Materials, line 8; and Page 10-18, Article 1002-2, MATERIALS, line 9, add the following to the table of item references:

ItemSectionType IL Blended Cement1024-1

Page 10-1, Subarticle 1000-3(A), Composition and Design, lines 25-27, replace the second paragraph with the following:

Fly ash may be substituted for cement in the mix design up to 30% at a rate of 1.0 lb of fly ash to each pound of cement replaced.

Page 10-2, Subarticle 1000-3(A), Composition and Design, lines 12-21, delete the third paragraph through the sixth paragraph beginning with "If any change is made to the mix design, submit..." through "...(applies to a decrease only)."

Page 10-5, Table 1000-1, REQUIREMENTS FOR CONCRETE, replace with the following:

			RFC	TA OUIREME	ABLE 100		RETE				
		Maxin		er-Cement		Consiste	ncy Max.		Cement	Content	·,
Class of Concrete	Min. Comp. Strength at 28 days	Air-En Cond		Non Entra Cond	ained	Vibrated	Non- Vibrated	Vib	rated	Non- V	ibrated
9	Mi S at	Rounded Aggregate	Angular Aggre- gate	Rounded Aggregate	Angular Aggre- gate	Vib	N Sib	Min.	Max.	Min.	Max.
Units	psi					inch	inch	lb/cy	lb/cy	lb/cy	lb/cy
AA	4,500	0.381	0.426	-	-	3.5	-	639	715	-	-
AA Slip Form	4,500	0.381	0.426	-	-	1.5	-	639	715	-	-
Drilled Pier	4,500	-	-	0.450	0.450	-	5-7 dry 7-9 wet	-	-	640	800
A	3,000	0.488	0.532	0.550	0.594	3.5	4	564	-	602	-
В	2,500	0.488	0.567	0.559	0.630	1.5 machine- placed 2.5 hand- placed	4	508	-	545	-
Sand Light- weight	4,500	-	0.420	-	-	4	-	715	-	-	-
Latex Modified	3,000 7 day	0.400	0.400	-	-	6	-	658	-	-	-
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed	-	Flow- able	-	-	40	100
Flowable Fill non-excavatable	125	as needed	as needed	as needed	as needed	-	Flow- able	-	-	100	as needed
Pavement	4,500 design, field 650 flexural, design only	0.559	0.559	-	-	1.5 slip form 3.0 hand place	-	526	-	-	-
Precast	See Table 1077-1	as needed	as needed	-	-	6	as needed	as needed	as needed	as needed	as needed
Prestress	per contract	See Table 1078-1	See Table 1078-1	-	-	8	-	564	as needed	_	-

Page 10-6, Subarticle 1000-4(I), Use of Fly Ash, lines 36-2, replace the first paragraph with the following:

Fly ash may be substituted for cement in the mix design up to 30% at a rate of 1.0 lb of fly ash to each pound of cement replaced. Use Table 1000-1 to determine the maximum allowable water-cementitious material (cement + fly ash) ratio for the classes of concrete listed.

Page 10-7, Table 1000-3, MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIO, delete the table.

Page 10-7, Article 1000-5, HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE, lines 30-31, delete the second sentence of the third paragraph.

Page 10-19, Article 1002-3, SHOTCRETE FOR TEMPORARY SUPPORT OF EXCAVATIONS, line 30, add the following at the end of Section 1002:

(H) Handling and Storing Test Panels

Notify the Area Materials Engineer when preconstruction or production test panels are made within 24 hours of shooting the panels. Field cure and protect test panels from damage in accordance with ASTM C1140 until the Department transports panels to the Materials and Tests Regional Laboratory for coring.

Page 10-23, Table 1005-1, AGGREGATE GRADATION-COARSE AGGREGATE, replace with the following:

Light-weight^C Size# 467M Std. ABC ABC 78M 57M Ξ 6M 14M 67 57 9 S 4 <u>С</u>. 100 100 2 See Subarticle 1005-4(A). See Subarticle 1005-4(B). 95-100 90-1/2" 10C 100 100 10C 100 AGGREGATE GRADATION - COARSE AGGREGATE 95-100 75-100 75. 97 100 95-100 90-100 20-55 100 1 3/4" 90-100 90-35-70 100 20-55 Percentage of Total by Weight Passing 0-10 1/2" 98-100 20-55 25-45 45₋79 55-80 25₋ 100 3/8" 0-20 0-30 80-100 100 75-100 20-55 100 **TABLE 1005-1** 0-10 0-10 0 - 100-8 0-5 35-55 85-100 35<u>-</u> 40 20₋ 20₄₅ # 0-20 5-20 0-15 0-5 40 #8 #10 25₋45 0-25 0-10 #16 0-8 #40 14-30 12^B О-12в ➣ ▶ ▶ ➣ ➣ ➣ \triangleright \triangleright ➣ \triangleright Asphalt Plant Mix, AST, Str. Conc, Weep Hole Drains AST, Sediment Control Stone Maintenance Stabilization AST, Concrete Pavement AST, Weep Hole Drains, Aggregate Base Course, Aggregate Stabilization Shoulder Drain, Sediment Control Stone AST, Str. Concrete, Asphalt Plant Mix AST, Str. Concrete, Asphalt Plant Mix Asphalt Plant Mix, Asphalt Plant Mix Str. Concrete Remarks AST AST AST

For Lightweight Aggregate used in Structural Concrete, see Subarticle 1014-2(E)(6).

Page 10-39, Article 1016-3, CLASSIFICATIONS, lines 27-32, replace with the following:

Select material is clean, unweathered durable, blasted rock material obtained from an approved source. While no specific gradation is required, the below criteria will be used to evaluate the materials for visual acceptance by the Engineer:

- (A) At least 50% of the rock has a diameter of from 1.5 ft to 3 ft,
- **(B)** 30% of the rock ranges in size from 2" to 1.5 ft in diameter, and
- (C) Not more than 20% of the rock is less than 2" in diameter. No rippable rock will be permitted.

Page 10-40, Tables 1018-1 and 1018-2, PIEDMONT, WESTERN AND COASTAL AREA CRITERIA FOR ACCEPTANCE OF BORROW MATERIAL, under second column in both tables, replace second row with the following:

Acceptable, but not to be used in the top 3 ft of embankment or backfill

Page 10-46, Article 1024-1, PORTLAND CEMENT, line 33, add the following as the ninth paragraph:

Use Type IL blended cement that meets AASHTO M 240, except that the limestone content is limited to between 5 and 12% by weight and the constituents shall be interground. Class F fly ash can replace a portion of Type IL blended cement and shall be replaced as outlined in Subarticle 1000-4(I) for Portland cement. For mixes that contain cement with alkali content between 0.6% and 1.0% and for mixes that contain a reactive aggregate documented by the Department, use a pozzolan in the amount shown in Table 1024-1.

Page 10-46, Table 1024-1, POZZOLANS FOR USE IN PORTLAND CEMENT CONCRETE, replace with the following:

POZZOLANS FO	TABLE 1024-1 OR USE IN PORTLAND CEMENT CONCRETE
Pozzolan	Rate
Class F Fly Ash	20% - 30% by weight of required cement content with 1.0 lb Class F fly ash per lb of cement replaced
Ground Granulated Blast	35%-50% by weight of required cement content
Furnace Slag	with 1.0 lb slag per lb of cement replaced
Microsilica	4%-8% by weight of required cement content with 1.0 lb microsilica per lb of cement replaced

Page 10-47, Subarticle 1024-3(B), Approved Sources, lines 16-18, replace the second sentence of the second paragraph with the following:

Tests shall be performed by AASHTO's designated National Transportation Product Evaluation Program (NTPEP) laboratory for concrete admixture testing.

Page 10-65, Article 1050-1, GENERAL, line 41, replace the first sentence with the following:

All fencing material and accessories shall meet Section 106.

Page 10-115, Subarticle 1074-7(B), Gray Iron Castings, lines 10-11, replace the first two sentences with the following:

Supply gray iron castings meeting all facets of AASHTO M 306 excluding proof load. Proof load testing will only be required for new casting designs during the design process, and conformance to M306 loading (40,000 lb.) will be required only when noted on the design documents.

Page 10-126, Table 1078-1, REQUIREMENTS FOR CONCRETE, replace with the following:

TABLE REQUIREMENTS I		
Property	28 Day Design Compressive Strength 6,000 psi or less	28 Day Design Compressive Strength greater than 6,000 psi
Maximum Water/Cementitious Material Ratio	0.45	0.40
Maximum Slump without HRWR	3.5"	3.5"
Maximum Slump with HRWR	8"	8"
Air Content (upon discharge into forms)	5 + 2%	5 + 2%

Page 10-151, Article 1080-4, INSPECTION AND SAMPLING, lines 18-22, replace (B), (C) and (D) with the following:

- (B) At least 3 panels prepared as specified in 5.5.10 of AASHTO M 300, Bullet Hole Immersion Test.
- (C) At least 3 panels of 4"x6"x1/4" for the Elcometer Adhesion Pull Off Test, ASTM D4541.
- (D) A certified test report from an approved independent testing laboratory for the Salt Fog Resistance Test, Cyclic Weathering Resistance Test, and Bullet Hole Immersion Test as specified in AASHTO M 300.
- (E) A certified test report from an approved independent testing laboratory that the product has been tested for slip coefficient and meets AASHTO M253, Class B.

Page 10-161, Subarticle 1081-1(A), Classifications, lines 29-33, delete first 3 sentences of the description for Type 2 and replace with the following:

Type 2 - A low-modulus, general-purpose adhesive used in epoxy mortar repairs. It may be used to patch spalled, cracked or broken concrete where vibration, shock or expansion and contraction are expected.

Page 10-162, Subarticle 1081-1(A), Classifications, lines 4-7, delete the second and third sentences of the description for Type 3A. Lines 16-22, delete Types 6A, 6B and 6C.

Page 10-162, Subarticle 1081-1(B), Requirements, lines 26-30, replace the second paragraph with the following:

For epoxy resin systems used for embedding dowel bars, threaded rods, rebar, anchor bolts and other fixtures in hardened concrete, the manufacturer shall submit test results showing that the bonding system will obtain 125% of the specified required yield strength of the fixture. Furnish certification that, for the particular bolt grade, diameter and embedment depth required, the anchor system will not fail by adhesive failure and that there is no movement of the anchor bolt. For certification and anchorage, use 3,000 psi as the minimum Portland cement concrete compressive strength used in this test. Use adhesives that meet Section 1081.

List the properties of the adhesive on the container and include density, minimum and maximum temperature application, setting time, shelf life, pot life, shear strength and compressive strength.

Page 10-163, Table 1081-1, PROPERTIES OF MIXED EPOXY RESIN SYSTEMS, replace with the following:

TABLE 1081-1 PROPERTIES OF MIXED EPOXY RESIN SYSTEMS	TIES OF	TABLE 1081-1 MIXED EPOX	1081-1 EPOXY H	RESIN SY	STEMS		
Property	Type 1	Type 2	Type 3	Туре 3A	Туре 4A	Туре 4В	Type 5
Viscosity-Poises at 77°F ± 2°F	Ge1	10-30	25-75	Gel	40-150	40-150	1-6
Spindle No.	1	ω	4	ŀ	4	4	2
Speed (RPM)	1	20	20	ł	10	10	50
Pot Life (Minutes)	20-50	30-60	20-50	5-50	40-80	40-80	20-60
Minimum Tensile Strength at 7 days (psi)	1,500	2,000	4,000	4,000	1,500	1,500	4,000
Tensile Elongation at 7 days (%)	30 min.	30 min.	2-5	2-5	5-15	5-15	2-5
Min. Compressive Strength of 2". mortar cubes at 24 hours	3,000 (Neat)	4,000-	6,000-	6,000 (Neat)	3,000	3,000	6,000
Min. Compressive Strength of 2" mortar cubes at 7 days	5,000 (Neat)	ı	ı	ı	ı	5,000	ı
Maximum Water Absorption (%)	1.5	1.0	1.0	1.5	1.0	1.0	1.0
Min. Bond Strength Slant Shear Test at 14 days (psi)	1,500	1,500	2,000	2,000	1,500	1,500	1,500

Page 10-164, Subarticle 1081-1(E), Prequalification, lines 31-33, replace the second sentence of the first paragraph with the following:

Manufacturers choosing to supply material for Department jobs must submit an application through the Value Management Unit with the following information for each type and brand name:

Page 10-164, Subarticle 1081-1(E)(3), line 37, replace with the following:

(3) Type of the material in accordance with Articles 1081-1 and 1081-4,

Page 10-165, Subarticle 1081-1(E)(6), line 1, in the first sentence of the first paragraph replace "AASHTO M 237" with "the specifications".

Page 10-165, Subarticle 1081-1(E), Prequalification, line 9-10, delete the second sentence of the last paragraph.

Page 10-165, Subarticle 1081-1(F), Acceptance, line 14, in the first sentence of the first paragraph replace "Type 1" with "Type 3".

Page 10-169, Subarticle 1081-3(G), Anchor Bolt Adhesives, delete this subarticle.

Page 10-170, Article 1081-3, HOT BITUMEN, line 9, add the following at the end of Section 1081:

1081-4 EPOXY RESIN ADHESIVE FOR BONDING TRAFFIC MARKINGS

(A) General

This section covers epoxy resin adhesive for bonding traffic markers to pavement surfaces.

(B) Classification

The types of epoxies and their uses are as shown below:

Type I – Rapid Setting, High Viscosity, Epoxy Adhesive. This type of adhesive provides rapid adherence to traffic markers to the surface of pavement.

Type II – Standard Setting, High Viscosity, Epoxy Adhesive. This type of adhesive is recommended for adherence of traffic markers to pavement surfaces when rapid set is not required.

Type III – Rapid Setting, Low Viscosity, Water Resistant, Epoxy Adhesive. This type of rapid setting adhesive, due to its low viscosity, is appropriate only for use with embedded traffic markers.

Type IV – Standard Set Epoxy for Blade Deflecting-Type Plowable Markers.

(C) Requirements

Epoxies shall conform to the requirements set forth in AASHTO M 237.

(D) Prequalification

Refer to Subarticle 1081-1(E).

(E) Acceptance

Refer to Subarticle 1081-1(F).

Page 10-173, Article 1084-2, STEEL SHEET PILES, lines 37-38, replace first paragraph with the following:

Steel sheet piles detailed for permanent applications shall be hot rolled and meet ASTM A572 or ASTM A690 unless otherwise required by the plans. Steel sheet piles shall be coated as required by the plans. Galvanized sheet piles shall be coated in accordance with Section 1076. Metallized sheet piles shall be metallized in accordance to the Project Special Provision "Thermal Sprayed Coatings (Metallization)" with an 8 mil, 99.9% aluminum alloy coating and a 0.5 mil seal coating. Any portion of the metallized sheet piling encased in concrete shall

receive a barrier coat. The barrier coat shall be an approved waterborne coating with a low-viscosity which readily absorbs into the pores of the aluminum thermal sprayed coating. The waterborne coating shall be applied at a spreading rate that results in a theoretical 1.5 mil dry film thickness. The manufacturer shall issue a letter of certification that the resin chemistry of the waterborne coating is compatible with the 99.9% aluminum thermal sprayed alloy and suitable for tidal water applications.

Page 10-174, Subarticle 1086-1(B)(1), Epoxy, lines 18-24, replace with the following:

The epoxy shall meet Article 1081-4.

The 2 types of epoxy adhesive which may be used are Type I, Rapid Setting, and Type II, Standard Setting. Use Type II when the pavement temperature is above 60°F or per the manufacturer's recommendations whichever is more stringent. Use Type I when the pavement temperature is between 50°F and 60°F or per the manufacturer's recommendations whichever is more stringent. Epoxy adhesive Type I, Cold Set, may be used to attach temporary pavement markers to the pavement surface when the pavement temperature is between 32°F and 50°F or per the manufacturer's recommendations whichever is more stringent.

Page 10-175, Subarticle 1086-2(E), Epoxy Adhesives, line 27, replace "Section 1081" with "Article 1081-4".

Page 10-177, Subarticle 1086-3(E), Epoxy Adhesives, line 22, replace "Section 1081" with "Article 1081-4".

Page 10-179, Subarticle 1087-4(A), Composition, lines 39-41, replace the third paragraph with the following:

All intermixed and drop-on glass beads shall not contain more than 75 ppm arsenic or 200 ppm lead.

Page 10-180, Subarticle 1087-4(B), Physical Characteristics, line 8, replace the second paragraph with the following:

All intermixed and drop-on glass beads shall comply with NCGS § 136-30.2 and 23 USC § 109(r).

Page 10-181, Subarticle 1087-7(A), Intermixed and Drop-on Glass Beads, line 24, add the following after the first paragraph:

Use X-ray Fluorescence for the normal sampling procedure for intermixed and drop-on beads, without crushing, to check for any levels of arsenic and lead. If any arsenic or lead is detected, the sample shall be crushed and repeat the test using X-ray Fluorescence. If the X-ray Fluorescence test shows more than a LOD of 5 ppm, test the beads using United States Environmental Protection Agency Method 6010B, 6010C or 3052 for no more than 75 ppm arsenic or 200 ppm lead.

GROUT PRODUCTION AND DELIVERY:

(3-17-15) 1003

SP10 R20

Revise the 2012 Standard Specifications as follows:

Replace Section 1003 with the following:

SECTION 1003 GROUT PRODUCTION AND DELIVERY

1003-1 DESCRIPTION

This section addresses cement grout to be used for structures, foundations, retaining walls, concrete barriers, embankments, pavements and other applications in accordance with the contract. Produce non-metallic grout composed of Portland cement and water and at the Contractor's option or as required, aggregate and pozzolans. Include chemical admixtures as required or needed. Provide sand cement or neat cement grout as required. Define "sand cement grout" as grout with only fine aggregate and "neat cement grout" as grout without aggregate.

The types of grout with their typical uses are as shown below:

Type 1 – A cement grout with only a 3-day strength requirement and a fluid consistency that is typically used for filling subsurface voids.

Type 2 – A nonshrink grout with strength, height change and flow conforming to ASTM C1107 that is typically used for foundations, ground anchors and soil nails.

Type 3 – A nonshrink grout with high early strength and freeze-thaw durability requirements that is typically used in pile blockouts, grout pockets, shear keys, dowel holes and recesses for concrete barriers and structures.

Type 4 – A neat cement grout with low strength, a fluid consistency and high fly ash content that is typically used for slab jacking.

Type 5 – A low slump, low mobility sand cement grout with minimal strength that is typically used for compaction grouting.

1003-2 MATERIALS

Refer to Division 10.

Item	Section
Chemical Admixtures	1024-3
Fine Aggregate	1014-1
Fly Ash	1024-5
Ground Granulated Blast Furnace Slag	1024-6
Portland Cement	1024-1
Silica Fume	1024-7
Water	1024-4

Do not use grout that contains soluble chlorides or more than 1% soluble sulfate. At the Contractor's option, use an approved packaged grout instead of the materials above except for water. Use packaged grouts that are on the NCDOT Approved Products List.

Use admixtures for grout that are on the NCDOT Approved Products List or other admixtures in accordance with Subarticle 1024-3(E) except do not use concrete additives or unclassified or other admixtures in Type 4 or 5 grout. Use Class F fly ash for Type 4 grout and Type II Portland cement for Type 5 grout.

Use well graded rounded aggregate with a gradation, liquid limit (LL) and plasticity index (PI) that meet Table 1003-1 for Type 5 grout. Fly ash may be substituted for a portion of the fines in the aggregate. Do not use any other pozzolans in Type 5 grout.

TABLE 1003-1 AGGREGATE REQUIREMENTS FOR TYPE 5 GROUT					
Grad	ation	Maximum Liquid	Maximum Plasticity Index		
Sieve Designation per AASHTO M 92	Percentage Passing (% by weight)	Limit			
3/8"	100		N/A		
No. 4	70 – 95				
No. 8	50 – 90				
No. 16	30 - 80	N/A			
No. 30	25 – 70				
No. 50	20 – 50				
No. 100	15 – 40				
No. 200	10 – 30	25	10		

1003-3 COMPOSITION AND DESIGN

When using an approved packaged grout, a grout mix design submittal is not required. Otherwise, submit proposed grout mix designs for each grout mix to be used in the work. Mixes for all grout shall be designed by a Certified Concrete Mix Design Technician or an Engineer licensed by the State of North Carolina. Mix proportions shall be determined by a testing laboratory approved by the Department. Base grout mix designs on laboratory trial batches that meet Table 1003-2 and this section. With permission, the Contractor may use a quantity of chemical admixture within the range shown on the current list of approved admixtures maintained by the Materials and Tests Unit.

Submit grout mix designs in terms of saturated surface dry weights on Materials and Tests Form 312U at least 35 days before proposed use. Adjust batch proportions to compensate for surface moisture contained in the aggregates at the time of batching. Changes in the saturated surface dry mix proportions will not be permitted unless revised grout mix designs have been submitted to the Engineer and approved.

Accompany Materials and Tests Form 312U with a listing of laboratory test results of compressive strength, density and flow or slump and if applicable, aggregate gradation,

durability and height change. List the compressive strength of at least three 2" cubes at the age of 3 and 28 days.

The Engineer will review the grout mix design for compliance with the contract and notify the Contractor as to its acceptability. Do not use a grout mix until written notice has been received. Acceptance of the grout mix design or use of approved packaged grouts does not relieve the Contractor of his responsibility to furnish a product that meets the contract. Upon written request from the Contractor, a grout mix design accepted and used satisfactorily on any Department project may be accepted for use on other projects.

Perform laboratory tests in accordance with the following test procedures:

Property	Test Method
Aggregate Gradation ^A	AASHTO T 27
Compressive Strength	AASHTO T 106
	AASHTO T 121,
Density (Unit Weight)	AASHTO T 133^{B} ,
	ANSI/API RP ^C 13B-1 ^B (Section 4, Mud Balance)
Durability	AASHTO T 161 ^D
Flow	ASTM C939 (Flow Cone)
Height Change	ASTM C1090 ^E
Slump	AASHTO T 119

- **A.** Applicable to grout with aggregate.
- **B.** Applicable to Neat Cement Grout.
- C. American National Standards Institute/American Petroleum Institute Recommended Practice.
- **D.** Procedure A (Rapid Freezing and Thawing in Water) required.
- **E.** Moist room storage required.

1003-4 GROUT REQUIREMENTS

Provide grout types in accordance with the contract. Use grouts with properties that meet Table 1003-2. The compressive strength of the grout will be considered the average compressive strength test results of three 2" cubes at each age. Make cubes that meet AASHTO T 106 from the grout delivered for the work or mixed on-site. Make cubes at such frequencies as the Engineer may determine and cure them in accordance with AASHTO T 106.

	TABLE 1003-2 GROUT REQUIREMENTS					
Type of Grout	Minimum Compressive Strength at		Height Change	Change Flow ^A /Slump ^B Du		
	3 days	28 days	at 28 days		Factor	
1	3,000 psi	_	_	10 - 30 sec	_	
2		Table 1 ^C		Fluid Consistency ^C	_	
3	5,000 psi	_	0 – 0.2%	Per Accepted Grout Mix Design/ Approved Packaged Grout	80	
$4^{\mathbf{D}}$	600 psi	1,500 psi	_	$10 - 26 \sec$	_	
5	_	500 psi	_	1 – 3"	_	

- **A.** Applicable to Type 1 through 4 grouts.
- **B.** Applicable to Type 5 grout.
- **C.** ASTM C1107.
- **D.** Use Type 4 grout with proportions by volume of 1 part cement and 3 parts fly ash.

1003-5 TEMPERATURE REQUIREMENTS

When using an approved packaged grout, follow the manufacturer's instructions for grout and air temperature at the time of placement. Otherwise, the grout temperature at the time of placement shall be not less than 50°F nor more than 90°F. Do not place grout when the air temperature measured at the location of the grouting operation in the shade away from artificial heat is below 40°F.

1003-6 ELAPSED TIME FOR PLACING GROUT

Agitate grout continuously before placement. Regulate the delivery so the maximum interval between the placing of batches at the work site does not exceed 20 minutes. Place grout before exceeding the times in Table 1003-3. Measure the elapsed time as the time between adding the mixing water to the grout mix and placing the grout.

ELAP	TABLE 1003-3 SED TIME FOR PLACING (with continuous agitation)	
	Maximum	Elapsed Time
Air or Grout Temperature, Whichever is Higher	No Retarding Admixture Used	Retarding Admixture Used
90°F or above	30 minutes	1 hr. 15 minutes
80°F through 89°F	45 minutes	1 hr. 30 minutes
79°F or below	60 minutes	1 hr. 45 minutes

1003-7 MIXING AND DELIVERY

Use grout free of any lumps and undispersed cement. When using an approved packaged grout, mix

grout in accordance with the manufacturer's instructions. Otherwise, comply with Articles 1000-8 through 1000-12 to the extent applicable for grout instead of concrete.

GEOSYNTHETICS:

(2-16-16) 1056 SP10 R25

Revise the 2012 Standard Specifications as follows:

Replace Section 1056 with the following:

SECTION 1056 GEOSYNTHETICS

1056-1 DESCRIPTION

Provide geosynthetics for subsurface drainage, separation, stabilization, reinforcement, erosion control, filtration and other applications in accordance with the contract. Use geotextiles, geocomposite drains and geocells that are on the NCDOT Approved Products List. Prefabricated geocomposite drains include sheet, strip and vertical drains (PVDs), i.e., "wick drains" consisting of a geotextile attached to and/or encapsulating a plastic drainage core. Geocells are comprised of ultrasonically welded polymer strips that when expanded form a 3D honeycomb grid that is typically filled with material to support vegetation.

If necessary or required, hold geotextiles and sheet drains in place with new wire staples, i.e., "sod staples" that meet Subarticle 1060-8(D) or new anchor pins. Use steel anchor pins with a diameter of at least 3/16" and a length of at least 18" and with a point at one end and a head at the other end that will retain a steel washer with an outside diameter of at least 1.5".

1056-2 HANDLING AND STORING

Load, transport, unload and store geosynthetics so geosynthetics are kept clean and free of damage. Label, ship and store geosynthetics in accordance with Section 7 of AASHTO M 288. Geosynthetics with defects, flaws, deterioration or damage will be rejected. Do not unwrap geosynthetics until just before installation. Do not leave geosynthetics exposed for more than 7 days before covering except for geosynthetics for temporary wall faces and erosion control.

1056-3 CERTIFICATIONS

Provide Type 1, Type 2 or Type 4 material certifications in accordance with Article 106-3 for geosynthetics. Define "minimum average roll value" (MARV) in accordance with ASTM D4439. Provide certifications with MARV for geosynthetic properties as required. Test geosynthetics using laboratories accredited by the Geosynthetic Accreditation Institute (GAI) to perform the required test methods. Sample geosynthetics in accordance with ASTM D4354.

1056-4 GEOTEXTILES

When required, sew geotextiles together in accordance with Article X1.1.4 of AASHTO M 288. Provide sewn seams with seam strengths meeting the required strengths for the geotextile type and class specified.

Provide geotextile types and classes in accordance with the contract. Geotextiles will be identified by the product name printed directly on the geotextile. When geotextiles are not marked with a product name or marked with only a manufacturing plant identification code, geotextiles will be identified by product labels attached to the geotextile wrapping. When identification is based on labels instead of markings, unwrap geotextiles just before use in the presence of the Engineer to confirm that the product labels on both ends of the outside of the geotextile outer wrapping match the labels affixed to both ends of the inside of the geotextile roll core. Partial geotextile rolls without the product name printed on the geotextile or product labels affixed to the geotextile roll core may not be used.

Use woven or nonwoven geotextiles with properties that meet Table 1056-1. Define "machine direction" (MD) and "cross-machine direction" (CD) in accordance with ASTM D4439.

TABLE 1056-1 GEOTEXTILE REQUIREMENTS						
Property	Requirement Type 1 Type 2 Type 3 ^A Type 4 Type 5 ^B				Test	
Typical Application	Shoulder Drains	Under Rip Rap	Silt Fence Fabric	Soil Stabilization	Temporary Walls	Method
Elongation (MD & CD)	≥ 50%	≥ 50%	≤ 25%	< 50%	< 50%	ASTM D4632
Grab Strength (MD & CD)			100 lb ^C			ASTM D4632
Tear Strength (MD & CD)	Table 1 ^D , Class 3	Table 1 ^D , Class 1	_	Table 1 ^D , Class 3	_	ASTM D4533
Puncture Strength			_			ASTM D6241
Ultimate Tensile Strength (MD & CD)	_	_	_	_	2,400 lb/ft ^C (unless required otherwise in the contract)	ASTM D4595
Permittivity	Table 2 ^D ,	Table 6 ^D ,			0.20 sec ^{-1,C}	ASTM D4491
Apparent Opening Size	15% to 50% <i>in</i> Situ Soil	15% to 50% <i>in Situ</i> Soil	Table 7 ^D	Table 5 ^D	0.60 mm ^E	ASTM D4751
UV Stability (Retained Strength)	Passing 0.075 mm	Passing 0.075mm			70% ^C (after 500 hr of exposure)	ASTM D4355

- Strength)

 A. Minimum roll width of 36" required.
- **B.** Minimum roll width of 13 ft required.
- C. MARV per Article 1056-3.
- **D.** AASHTO M 288.
- **E.** Maximum average roll value.

1056-5 GEOCOMPOSITE DRAINS

Provide geocomposite drain types in accordance with the contract and with properties that meet Table 1056-2.

	TABLE 1056-2 GEOCOMPOSITE DRAIN REQUIREMENTS				
Duam autre	Requirement			Test	
Property	Sheet Drain	Strip Drain	Wick Drain	Method	
Width	≥ 12" (unless required otherwise in the	12" ±1/4"	4" ±1/4"	N/A	

	contract)			
In-Plane Flow Rate ^A	6 gpm/ft	15 gpm/ft	1.5 gpm ^{B}	
(with gradient of 1.0	@ applied normal	@ applied normal	@ applied normal	ASTM
and 24-hour seating	compressive	compressive	compressive	D4716
period)	stress of 10 psi	stress of 7.26 psi	stress of 40 psi	

- **A.** MARV per Article 1056-3.
- **B.** Per 4" drain width.

For sheet and strip drains, use accessories (e.g., pipe outlets, connectors, fittings, etc.) recommended by the Drain Manufacturer. Provide sheet and strip drains with Type 1 geotextiles heat bonded or glued to HDPE, polypropylene or high impact polystyrene drainage cores that meet Table 1056-3.

TABLE 1056-3 DRAINAGE CORE REQUIREMENTS			
Requirement (MARV) Test Method			
Property	Sheet Drain		
Thickness	1/4"	1"	ASTM D1777 or D5199
Compressive Strength	40 psi	30 psi	ASTM D6364

For wick drains with a geotextile wrapped around a corrugated drainage core and seamed to itself, use drainage cores with an ultimate tensile strength of at least 225 lb per 4" width in accordance with ASTM D4595 and geotextiles with properties that meet Table 1056-4.

TABLE 1056-4 WICK DRAIN GEOTEXTILE REQUIREMENTS					
Property	Requirement	Test Method			
Elongation	≥ 50%	ASTM D4632			
Grab Strength	Table 1A	ASTM D4632			
Tear Strength	Table 1 ^A , Class 3 ASTM D403 ASTM D403				
Puncture Strength		ASTM D6241			
Permittivity	0.7 sec ^{-1,B}	ASTM D4491			
Apparent Opening Size (AOS)	Table 2 ^A ,	ASTM D4751			
UV Stability > 50% in Situ Soil ASTM D4355					
(Retained Strength)	Passing 0.075 mm	AST WI D4333			

- **A.** AASHTO M 288.
- **B.** MARV per Article 1056-3.

For wick drains with a geotextile fused to both faces of a corrugated drainage core along the peaks of the corrugations, use wick drains with an ultimate tensile strength of at least 1,650 lb/ft in accordance with ASTM D4595 and geotextiles with a permittivity, AOS and UV stability that meet Table 1056-4.

1056-6 GEOCELLS

Geocells will be identified by product labels attached to the geocell wrapping. Unwrap geocells just before use in the presence of the Engineer. Previously opened geocell products will be rejected.

Manufacture geocells from virgin polyethylene resin with no more than 10% rework, also called "regrind", materials. Use geocells made from textured and perforated HDPE strips with an open area of 10% to 20% and properties that meet Table 1056-5.

TABLE 1056-5 GEOCELL REQUIREMENTS				
Property	Minimum Requirement	Test Method		
Cell Depth	4"	N/A		
Sheet Thickness	50 mil -5%, +10%	ASTM D5199		
Density	58.4 lb/cf	ASTM D1505		
Carbon Black Content	1.5%	ASTM D1603 or D4218		
ESCR ^A	5000 hr	ASTM D1693		
Coefficient of Direct Sliding (with material that meets AASHTO M 145 for soil classification A-2)	0.85	ASTM D5321		
Short-Term Seam (Peel) Strength (for 4" seam)	320 lb	USACE ^C Technical		
Long-Term Seam (Hang) Strength ^B (for 4" seam)	160 lb	Report GL-86-19, Appendix A		

- A. Environmental Stress Crack Resistance.
- **B.** Minimum test period of 168 hr with a temperature change from 74°F to 130°F in 1-hour cycles.
- **C.** US Army Corps of Engineers.

Provide geocell accessories (e.g., stakes, pins, clips, staples, rings, tendons, anchors, deadmen, etc.) recommended by the Geocell Manufacturer.

STANDARD SPECIAL PROVISION AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

(5-20-08) Z-2

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in General Statute 143C-6-11(c). Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Subarticle 108-13(E) of the 2012 Standard Specifications.

STANDARD SPECIAL PROVISION NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY

(5-17-11) Z-3

Seed shall be sampled and tested by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory. When said samples are collected, the vendor shall supply an independent laboratory report for each lot to be tested. Results from seed so sampled shall be final. Seed not meeting the specifications shall be rejected by the Department of Transportation and shall not be delivered to North Carolina Department of Transportation warehouses. If seed has been delivered it shall be available for pickup and replacement at the supplier's expense.

Any re-labeling required by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory, that would cause the label to reflect as otherwise specified herein shall be rejected by the North Carolina Department of Transportation.

Seed shall be free from seeds of the noxious weeds Johnsongrass, Balloonvine, Jimsonweed, Witchweed, Itchgrass, Serrated Tussock, Showy Crotalaria, Smooth Crotalaria, Sicklepod, Sandbur, Wild Onion, and Wild Garlic. Seed shall not be labeled with the above weed species on the seed analysis label. Tolerances as applied by the Association of Official Seed Analysts will NOT be allowed for the above noxious weeds except for Wild Onion and Wild Garlic.

Tolerances established by the Association of Official Seed Analysts will generally be recognized. However, for the purpose of figuring pure live seed, the found pure seed and found germination percentages as reported by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory will be used. Allowances, as established by the NCDOT, will be recognized for minimum pure live seed as listed on the following pages.

The specifications for restricted noxious weed seed refers to the number per pound as follows:

Restricted Noxious Weed	Limitations per Lb. Of Seed	Restricted Noxious Weed	Limitations per Lb. of Seed
Blessed Thistle Cocklebur Spurred Anoda Velvetleaf Morning-glory Corn Cockle Wild Radish Purple Nutsedge Yellow Nutsedge Canada Thistle Field Bindweed	4 seeds 4 seeds 4 seeds 4 seeds 4 seeds 8 seeds 10 seeds 12 seeds 27 seeds 27 seeds 27 seeds 27 seeds	Cornflower (Ragged Robin) Texas Panicum Bracted Plantain Buckhorn Plantain Broadleaf Dock Curly Dock Dodder Giant Foxtail Horsenettle Quackgrass Wild Mustard	27 seeds 27 seeds 54 seeds
Hedge Bindweed	27 seeds	Wild Middled	3 1 300ds

Seed of Pensacola Bahiagrass shall not contain more than 7% inert matter, Kentucky Bluegrass, Centipede and Fine or Hard Fescue shall not contain more than 5% inert matter whereas a

maximum of 2% inert matter will be allowed on all other kinds of seed. In addition, all seed shall not contain more than 2% other crop seed nor more than 1% total weed seed. The germination rate as tested by the North Carolina Department of Agriculture shall not fall below 70%, which includes both dormant and hard seed. Seed shall be labeled with not more than 7%, 5% or 2% inert matter (according to above specifications), 2% other crop seed and 1% total weed seed.

Exceptions may be made for minimum pure live seed allowances when cases of seed variety shortages are verified. Pure live seed percentages will be applied in a verified shortage situation. Those purchase orders of deficient seed lots will be credited with the percentage that the seed is deficient.

FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

Minimum 85% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 83% pure live seed will not be approved.

Sericea Lespedeza Oats (seeds)

Minimum 80% pure live seed; maximum 1% total weed seed; maximum 2% total other crop; maximum 144 restricted noxious weed seed per pound. Seed less than 78% pure live seed will not be approved.

Tall Fescue (all approved varieties)

Kobe Lespedeza

Bermudagrass

Browntop Millet

Korean Lespedeza German Millet – Strain R Weeping Lovegrass Clover – Red/White/Crimson

Carpetgrass

Minimum 78% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 76% pure live seed will not be approved.

Common or Sweet Sundangrass

Minimum 76% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 74% pure live seed will not be approved.

Rye (grain; all varieties) Kentucky Bluegrass (all approved varieties) Hard Fescue (all approved varieties) Shrub (bicolor) Lespedeza

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

Centipedegrass

Japanese Millet

Crownvetch Reed Canary Grass

Pensacola Bahiagrass Zoysia

Creeping Red Fescue

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 5% inert matter; maximum 144 restricted noxious weed seed per pound.

Barnyard Grass

Big Bluestem

Little Bluestem

Bristly Locust

Birdsfoot Trefoil

Indiangrass

Orchardgrass

Switchgrass

Yellow Blossom Sweet Clover

STANDARD SPECIAL PROVISION

ERRATA

(1-17-12) (Rev. 04-21-15)

Z-4

Revise the 2012 Standard Specifications as follows:

Division 2

Page 2-7, line 31, Article 215-2 Construction Methods, replace "Article 107-26" with "Article 107-25".

Page 2-17, Article 226-3, Measurement and Payment, line 2, delete "pipe culverts,".

Page 2-20, Subarticle 230-4(B), Contractor Furnished Sources, change references as follows: Line 1, replace "(4) Buffer Zone" with "(c) Buffer Zone"; Line 12, replace "(5) Evaluation for Potential Wetlands and Endangered Species" with "(d) Evaluation for Potential Wetlands and Endangered Species"; and Line 33, replace "(6) Approval" with "(4) Approval".

Division 3

Page 3-1, after line 15, Article 300-2 Materials, replace "1032-9(F)" with "1032-6(F)".

Division 4

Page 4-77, line 27, Subarticle 452-3(C) Concrete Coping, replace "sheet pile" with "reinforcement".

Division 6

Page 6-7, line 31, Article 609-3 Field Verification of Mixture and Job Mix Formula Adjustments, replace "30" with "45".

Page 6-10, line 42, Subarticle 609-6(C)(2), replace "Subarticle 609-6(E)" with "Subarticle 609-6(D)".

Page 6-11, Table 609-1 Control Limits, replace "Max. Spec. Limit" for the Target Source of $P_{0.075}/P_{be}$ Ratio with "1.0".

Page 6-40, Article 650-2 Materials, replace "Subarticle 1012-1(F)" with "Subarticle 1012-1(E)"

Division 7

Page 7-1, Article 700-3, CONCRETE HAULING EQUIPMENT, line 33, replace "competion" with "completion".

Division 8

Page 8-23, line 10, Article 838-2 Materials, replace "Portland Cement Concrete, Class B" with "Portland Cement Concrete, Class A".

Division 10

Page 10-166, Article 1081-3 Hot Bitumen, replace "Table 1081-16" with "Table 1081-2", replace "Table 1081-17" with "Table 1081-3", and replace "Table 1081-18" with "Table 1081-4".

Division 12

Page 12-7, Table 1205-3, add "FOR THERMOPLASTIC" to the end of the title.

Page 12-8, Subarticle 1205-5(B), line 13, replace "Table 1205-2" with "Table 1205-4".

Page 12-8, Table 1205-4 and 1205-5, replace "THERMOPLASTIC" in the title of these tables with "POLYUREA".

Page 12-9, Subarticle 1205-6(B), line 21, replace "Table 1205-4" with "Table 1205-6".

Page 12-11, Subarticle 1205-8(C), line 25, replace "Table 1205-5" with "Table 1205-7".

Division 15

Page 15-4, Subarticle 1505-3(F) Backfilling, line 26, replace "Subarticle 235-4(C)" with "Subarticle 235-3(C)".

Page 15-6, Subarticle 1510-3(B), after line 21, replace the allowable leakage formula with the following: $W=LD\sqrt{P} \div 148,000$

Page 15-6, Subarticle 1510-3(B), line 32, delete "may be performed concurrently or" and replace with "shall be performed".

Page 15-17, Subarticle 1540-3(E), line 27, delete "Type 1".

Division 17

Page 17-26, line 42, Subarticle 1731-3(D) Termination and Splicing within Interconnect Center, delete this subarticle.

Revise the 2012 Roadway Standard Drawings as follows:

1633.01 Sheet 1 of 1, English Standard Drawing for Matting Installation, replace "1633.01" with "1631.01".

STANDARD SPECIAL PROVISION

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds)

(3-18-03) (Rev. 10-15-13)

Z-04a

Within Quarantined Area

This project may be within a county regulated for plant and/or pests. If the project or any part of the Contractor's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal/state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

Originating in a Quarantined County

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture/United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-733-6932, or *http://www.ncagr.gov/plantind/* to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

- 1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
- 2. Plants with roots including grass sod.
- 3. Plant crowns and roots.
- 4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
- 5. Hay, straw, fodder, and plant litter of any kind.
- 6. Clearing and grubbing debris.
- 7. Used agricultural cultivating and harvesting equipment.
- 8. Used earth-moving equipment.
- 9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed or other noxious weeds.

STANDARD SPECIAL PROVISION

MINIMUM WAGES

(7-21-09) Z-5

FEDERAL: The Fair Labor Standards Act provides that with certain exceptions every employer shall pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

STATE: The North Carolina Minimum Wage Act provides that every employer shall pay to each of his employees, wages at a rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all skilled labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all unskilled labor on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

This determination of the intent of the application of this act to the contract on this project is the responsibility of the Contractor.

The Contractor shall have no claim against the Department of Transportation for any changes in the minimum wage laws, Federal or State. It is the responsibility of the Contractor to keep fully informed of all Federal and State Laws affecting his contract.

STANDARD SPECIAL PROVISION

AWARD OF CONTRACT

(6-28-77)(Rev 2/16/2016)

Z-6

"The North Carolina Department of Transportation, in accordance with the provisions of *Title VI* of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Department of Transportation (49 C.F.R., Part 21), issued pursuant to such act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin".

TITLE VI AND NONDISCRIMINATION

I. <u>Title VI Assurance</u>

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- (1) Compliance with Regulations: The contractor shall comply with the Regulation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- (2) **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- (3) Solicitations for Subcontractors, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- (4) Information and Reports: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the North Carolina Department of Transportation (NCDOT) or the Federal Highway Administration (FHWA) to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the NCDOT, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.

- (5) **Sanctions for Noncompliance:** In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the NCDOT shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - (a) Withholding of payments to the contractor under the contract until the contractor complies, and/or
 - (b) Cancellation, termination or suspension of the contract, in whole or in part.
- **(6) Incorporation of Provisions:** The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

The contractor shall take such action with respect to any subcontractor procurement as the NCDOT or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance: provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the NCDOT to enter into such litigation to protect the interests of the NCDOT, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

II. <u>Title VI Nondiscrimination Program</u>

Title VI of the 1964 Civil Rights Act, 42 U.S.C. 2000d, provides that: "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." The broader application of nondiscrimination law is found in other statutes, executive orders, and regulations (see Section III, Pertinent Nondiscrimination Authorities), which provide additional protections based on age, sex, disability and religion. In addition, the 1987 Civil Rights Restoration Act extends nondiscrimination coverage to all programs and activities of federal-aid recipients and contractors, including those that are not federally-funded.

Nondiscrimination Assurance

The North Carolina Department of Transportation (NCDOT) hereby gives assurance that no person shall on the ground of race, color, national origin, sex, age, and disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity conducted by the recipient, as provided by Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and any other related Civil Rights authorities, whether those programs and activities are federally funded or not.

Obligation

During the performance of this contract, the Contractor and its subcontractors are responsible for complying with NCDOT's Title VI Program. The Contractor must ensure that NCDOT's Notice of Nondiscrimination is posted in conspicuous locations accessible to all employees and subcontractors on the jobsite, along with the Contractor's own Equal Employment Opportunity (EEO) Policy Statement. The Contractor shall physically incorporate this "TITLE VI AND NONDISCRIMINATION" language, in its entirety, into all its subcontracts on federally-assisted and state-funded NCDOT-owned projects, and ensure its inclusion by subcontractors into all subsequent lower tier subcontracts. The Contractor and its subcontractors shall also physically incorporate the FHWA-1273, in its entirety, into all subcontracts and subsequent lower tier subcontracts on Federal-aid highway construction contracts only. The Contractor is also responsible for making its subcontractors aware of NCDOT's Discrimination Complaints Process, as follows:

FILING OF COMPLAINTS

- 1. Applicability These complaint procedures apply to the beneficiaries of the NCDOT's programs, activities, and services, including, but not limited to, members of the public, contractors, subcontractors, consultants, and other sub-recipients of federal and state funds.
- 2. Eligibility Any person or class of persons who believes he/she has been subjected to discrimination or retaliation prohibited by any of the Civil Rights authorities, based upon race, color, sex, age, national origin, or disability, may file a written complaint with NCDOT's Civil Rights office. The law prohibits intimidation or retaliation of any sort. The complaint may be filed by the affected individual or a representative, and must be in writing.
- **3. Time Limits and Filing Options** A complaint must be filed no later than 180 calendar days after the following:
 - > The date of the alleged act of discrimination; or
 - The date when the person(s) became aware of the alleged discrimination; or
 - ➤ Where there has been a continuing course of conduct, the date on which that conduct was discontinued or the latest instance of the conduct.

Title VI and other discrimination complaints may be submitted to the following entities:

- ➤ North Carolina Department of Transportation, Office of Equal Opportunity & Workforce Services (EOWS), External Civil Rights Section, 1511 Mail Service Center, Raleigh, NC 27699-1511; 919-508-1808 or toll free 800-522-0453
- ➤ US Department of Transportation, Departmental Office of Civil Rights, External Civil Rights Programs Division, 1200 New Jersey Avenue, SE, Washington, DC 20590; 202-366-4070

Federal Highway Administration, North Carolina Division Office, 310 New Bern Avenue, Suite 410, Raleigh, NC 27601, 919-747-7010

Federal Highway Administration, Office of Civil Rights, 1200 New Jersey Avenue, SE, 8th Floor, E81-314, Washington, DC 20590, 202-366-0693 / 366-0752

Federal Transit Administration, Office of Civil Rights, ATTN: Title VI Program Coordinator, East Bldg. 5th Floor – TCR, 1200 New Jersey Avenue, SE, Washington, DC 20590

Federal Aviation Administration, Office of Civil Rights, 800 Independence Avenue, SW, Washington, DC 20591, 202-267-3258

- ➤ US Department of Justice, Special Litigation Section, Civil Rights Division, 950 Pennsylvania Avenue, NW, Washington, DC 20530, 202-514-6255 or toll free 877-218-5228
- **4. Format for Complaints** Complaints must be in **writing** and **signed** by the complainant(s) or a representative and include the complainant's name, address, and telephone number. Complaints received by fax or e-mail will be acknowledged and processed. Allegations received by telephone will be reduced to writing and provided to the complainant for confirmation or revision before processing. Complaints will be accepted in other languages including Braille.
- **5. Discrimination Complaint Form** Contact NCDOT EOWS at the phone number above to receive a full copy of the Discrimination Complaint Form and procedures.

6. Complaint Basis – Allegations must be based on issues involving race, color, national origin, sex, age, or disability. The term "basis" refers to the complainant's membership in a protected group category. Contact this office to receive a Discrimination Complaint Form.

Protected Categories	Definition	Examples	Applicable Statutes and Regulations	
			FHWA	FTA
Race	An individual belonging to	Black/African American,	Title VI of	Title VI of
	one of the accepted racial	Hispanic/Latino, Asian,	the Civil	the Civil
	groups; or the perception,	American Indian/Alaska	Rights Act	Rights Act
	based usually on physical	Native, Native	of 1964;	of 1964;
	characteristics that a person is	Hawaiian/Pacific	49 CFR Part	49 CFR
	a member of a racial group	Islander, White	21;	Part 21;
Color	Color of skin, including shade	Black, White, brown,	23 CFR 200	Circular
	of skin within a racial group	yellow, etc.		4702.1B
National	Place of birth. Citizenship is	Mexican, Cuban,		
Origin	not a factor. Discrimination	Japanese, Vietnamese,		
	based on language or a	Chinese		
	person's accent is also			
	covered.			
Sex	Gender	Women and Men	1973	Title IX of
			Federal-Aid	the
			Highway	Education
			Act	Amendmen
				ts of 1972
Age	Persons of any age	21 year old person	Age Discrimination Act of	
			1975	
Disability	Physical or mental	Blind, alcoholic, para-	Section 504 of the	
	impairment, permanent or	amputee, epileptic,	Rehabilitation	Act of
	temporary, or perceived.	diabetic, arthritic	1973; Americans with	
			Disabilities A	ct of 1990

III. Pertinent Nondiscrimination Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities, including, but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;

- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).
- Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e *et seq.*, Pub. L. 88-352), (prohibits employment discrimination on the basis of race, color, religion, sex, or national origin);
- 49 CFR Part 26, regulation to ensure nondiscrimination in the award and administration of DOT-assisted contracts in the Department's highway, transit, and airport financial assistance programs, as regards the use of Disadvantaged Business Enterprises (DBEs);
- Form FHWA-1273, "Required Contract Provisions," a collection of contract provisions and proposal notices that are generally applicable to *all Federal-aid construction projects* and must be made a part of, and physically incorporated into, *all federally-assisted contracts*, as well as appropriate subcontracts and purchase orders, particularly Sections II (Nondiscrimination) and III (Nonsegregated Facilities).

STANDARD SPECIAL PROVISION

ON-THE-JOB TRAINING

(10-16-07) (Rev. 4-21-15) Z-10

Description

The North Carolina Department of Transportation will administer a custom version of the Federal On-the-Job Training (OJT) Program, commonly referred to as the Alternate OJT Program. All contractors (existing and newcomers) will be automatically placed in the Alternate Program. Standard OJT requirements typically associated with individual projects will no longer be applied at the project level. Instead, these requirements will be applicable on an annual basis for each contractor administered by the OJT Program Manager.

On the Job Training shall meet the requirements of 23 CFR 230.107 (b), 23 USC – Section 140, this provision and the On-the-Job Training Program Manual.

The Alternate OJT Program will allow a contractor to train employees on Federal, State and privately funded projects located in North Carolina. However, priority shall be given to training employees on NCDOT Federal-Aid funded projects.

Minorities and Women

Developing, training and upgrading of minorities and women toward journeyman level status is a primary objective of this special training provision. Accordingly, the Contractor shall make every effort to enroll minority and women as trainees to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

Assigning Training Goals

The Department, through the OJT Program Manager, will assign training goals for a calendar year based on the contractors' past three years' activity and the contractors' anticipated upcoming year's activity with the Department. At the beginning of each year, all contractors eligible will be contacted by the Department to determine the number of trainees that will be assigned for the upcoming calendar year. At that time the Contractor shall enter into an agreement with the Department to provide a self-imposed on-the-job training program for the calendar year. This agreement will include a specific number of annual training goals agreed to by both parties. The number of training assignments may range from 1 to 15 per contractor per calendar year. The Contractor shall sign an agreement to fulfill their annual goal for the year.\

Training Classifications

The Contractor shall provide on-the-job training aimed at developing full journeyman level workers in the construction craft/operator positions. Preference shall be given to providing training in the following skilled work classifications:

Equipment Operators Office Engineers

Truck Drivers Estimators

Carpenters Iron / Reinforcing Steel Workers

Concrete Finishers Mechanics
Pipe Layers Welders

The Department has established common training classifications and their respective training requirements that may be used by the contractors. However, the classifications established are not all-inclusive. Where the training is oriented toward construction applications, training will be allowed in lower-level management positions such as office engineers and estimators. Contractors shall submit new classifications for specific job functions that their employees are performing. The Department will review and recommend for acceptance to FHWA the new classifications proposed by contractors, if applicable. New classifications shall meet the following requirements:

Proposed training classifications are reasonable and realistic based on the job skill classification needs, and

The number of training hours specified in the training classification is consistent with common practices and provides enough time for the trainee to obtain journeyman level status.

The Contractor may allow trainees to be trained by a subcontractor provided that the Contractor retains primary responsibility for meeting the training and this provision is made applicable to the subcontract. However, only the Contractor will receive credit towards the annual goal for the trainee.

Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman level status or in which they have been employed as a journeyman.

Records and Reports

The Contractor shall maintain enrollment, monthly and completion reports documenting company compliance under these contract documents. These documents and any other information as requested shall be submitted to the OJT Program Manager.

Upon completion and graduation of the program, the Contractor shall provide each trainee with a certification Certificate showing the type and length of training satisfactorily completed.

Trainee Interviews

All trainees enrolled in the program will receive an initial and Trainee/Post graduate interview conducted by the OJT program staff.

Trainee Wages

Contractors shall compensate trainees on a graduating pay scale based upon a percentage of the prevailing minimum journeyman wages (Davis-Bacon Act). Minimum pay shall be as follows:

60 percent	of the journeyman wage for the first half of the training period
75 percent	of the journeyman wage for the third quarter of the training period
90 percent	of the journeyman wage for the last quarter of the training period

In no instance shall a trainee be paid less than the local minimum wage. The Contractor shall adhere to the minimum hourly wage rate that will satisfy both the NC Department of Labor (NCDOL) and the Department.

Achieving or Failing to Meet Training Goals

The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and who receives training for at least 50 percent of the specific program requirement. Trainees will be allowed to be transferred between projects if required by the Contractor's scheduled workload to meet training goals.

If a contractor fails to attain their training assignments for the calendar year, they may be taken off the NCDOT's Bidders List.

Measurement and Payment

No compensation will be made for providing required training in accordance with these contract documents.

STANDARD SPECIAL PROVISION

NAME CHANGE FOR NCDENR

(1-19-16) Z-11

Description

Wherever in the 2012 Standard Specifications, Project Special Provisions, Standard Special Provisions, Permits or Plans that reference is made to "NCDENR" or "North Carolina Department of Environment and Natural Resources", replace with "NCDEQ" or "North Carolina Department of Environmental Quality" respectively, as the case may be.

BORROW PIT DEWATERING BASIN:

(3-17-09) (Rev 3-2-11)

Description

Water discharge from borrow pit sites shall not cause surface waters to exceed 50 NTUs (nephelometric turbidity unit) in streams not designated as trout waters and 10 NTUs in streams, lakes or reservoirs designated as trout waters. For lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTUs. If the turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased.

Construct, maintain and remove earth embankments used to reduce turbidity from dewatering borrow sites. Work includes providing porous coir fiber baffle, filtration geotextile, stone and outlet structures; cleaning out, maintaining, removing and disposing of the borrow pit dewatering basin and all components; and reshaping, dressing, seeding and mulching the area.

Materials

Refer to Division 10

Item	Section
Riprap, Class A, B, 1, and 2	1042
Geotextile for Drainage, Type 2	1056
Coir Fiber Baffle	1640-2

Use suitable excavated materials, as specified in Sections 225, 230 and 240 of the *Standard Specifications* in the construction of earth embankments for borrow pit dewatering basins, except where otherwise specified.

Construction Methods

Construct borrow pit dewatering basins according to the detail in the erosion control plans, and at locations shown on Reclamation Plans or in areas as directed.

The volume of the borrow pit dewatering basin will be based on a 2 hour retention time. The pump rate shall not exceed 1,000 GPM. The Contractor, at his option, may use a greater retention time for managing turbidity.

The straight line distance between the inlet and outlet shall be divided to include a forebay chamber in the upper quarter cell. Install one porous coir fiber baffle across the full width of the basin to delineate the forebay chamber. Do not use earthen or rock baffle. Install filtration geotextile on the interior side slopes and the floor of the forebay.

The water pumped from the borrow pit into the dewatering basin shall be obtained from the top of the water column and shall be discharged into the forebay in a non-erodible manner.

The borrow pit dewatering basin outlet shall be a vertical non-perforated riser pipe or flash board riser attached with a watertight connection to a barrel that carries the water through the embankment.

Maintenance and Removal

Maintain the borrow pit dewatering basin, coir fiber baffle, and remove and dispose of silt accumulations in accordance with Article 1630-3 of the *Standard Specifications*. The Contractor may include a drain device for maintenance and removal at his discretion.

Remove the borrow pit dewatering basin once dewatering operations are completed. Grade, seed, and mulch the area after removal of the borrow pit dewatering basin in accordance with Section 1660 of the *Standard Specifications*. The area shall be stabilized with an approved groundcover before final acceptance of the site.

Measurement and Payment

No direct payment will be made for borrow pit dewatering basins with the exception of the work of silt removal during dewatering basin operation and the work of seeding and mulching after removal of the dewatering basin. All other work and materials required for installation, maintenance and removal of borrow pit dewatering basins shall be incidental to *Borrow Excavation*. Such price and payments will be full compensation for the work of constructing, maintaining and removing the borrow pit dewatering basin including, but not limited to, the construction and removal of the borrow pit dewatering basin; furnishing of the outlet structure, baffle, filtration geotextile, stone and optional drain devices; and removal of all such items once dewatering operations are completed.

Removal and disposal of silt accumulations during dewatering operations will be measured and paid at the contract unit price per cubic yard for *Silt Excavation* in accordance with Article 1630-4 of the *Standard Specifications*.

Grading, seeding, and mulching the area after removal of the borrow pit dewatering basin will be measured and paid at the contract unit price per acre for *Seeding and Mulching* in accordance with Section 1660-8 of the *Standard Specifications*.

COIR FIBER MAT:

Description

Furnish material, install and maintain coir fiber mat in locations shown on the plans or in locations as directed. Work includes providing all materials, excavating and backfilling, and placing and securing coir fiber mat with stakes, steel reinforcement bars or staples as directed.

Materials

ItemSectionCoir Fiber Mat1060-14

Anchors: Stakes, reinforcement bars, or staples shall be used as anchors.

Wooden Stakes:

Provide hardwood stakes 12"- 24" long with a 2" x 2" nominal square cross section. One end of the stake must be sharpened or beveled to facilitate driving through the coir fiber mat and down into the underlying soil. The other end of the stake needs to have a 1"- 2" long head at the top with a 1"- 2" notch following to catch and secure the coir fiber mat.

Steel Reinforcement Bars:

Provide uncoated #10 steel reinforcement bars 24" nominal length. The bars shall have a 4" diameter bend at one end with a 4" straight section at the tip to catch and secure the coir fiber mat.

Staples:

Provide staples made of 0.125" diameter new steel wire formed into a u shape not less than 12" in length with a throat of 1" in width.

Construction Methods

Place the coir fiber mat immediately upon final grading. Provide a smooth soil surface free from stones, clods, or debris that will prevent the contact of the mat with the soil. Unroll the mat and apply without stretching such that it will lie smoothly but loosely on the soil surface.

For stream relocation applications, take care to preserve the required line, grade, and cross section of the area covered. Bury the top slope end of each piece of mat in a narrow trench at least 6 in. deep and tamp firmly. Where one roll of matting ends and a second roll begins, overlap the end of the upper roll over the buried end of the second roll so there is a 6 in. overlap. Construct check trenches at least 12 in. deep every 50 ft. longitudinally along the edges of the mat or as directed. Fold over and bury mat to the full depth of the trench, close and tamp firmly. Overlap mat at least 6 in. where 2 or more widths of mat are installed side by side.

Place anchors across the mat at the ends approximately 1 ft. apart. Place anchors along the outer edges and down the center of the mat 3 ft. apart.

Adjustments in the trenching or anchoring requirements to fit individual site conditions may be required.

Measurement and Payment

Coir Fiber Mat will be measured and paid for as the actual number of square yards measured along the surface of the ground over which coir fiber mat is installed and accepted.

No measurement will be made for anchor items.

Payment will be made under:

Pay ItemPay UnitCoir Fiber MatSquare Yard

MINIMIZE REMOVAL OF VEGETATION:

The Contractor shall minimize removal of vegetation within project limits to the maximum extent practicable. Vegetation along stream banks and adjacent to other jurisdictional resources outside the construction limits shall only be removed upon approval of Engineer. No additional payment will be made for this minimization work.

NATIVE GRASS SEEDING AND MULCHING: (West)

Native Grass Seeding and Mulching shall be performed on the disturbed areas of wetlands and riparian areas, and adjacent to Stream Relocation and/or trout stream construction within a 50 foot zone on both sides of the stream or depression, measured from top of stream bank or center of depression. The stream bank of the stream relocation shall be seeded by a method that does not alter the typical cross section of the stream bank. Native Grass Seeding and Mulching shall also be performed in the permanent soil reinforcement mat section of preformed scour holes, and in other areas as directed.

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

August 1 - June 1		May 1 – September 1	
18#	Creeping Red Fescue	18#	Creeping Red Fescue
8#	Big Bluestem	8#	Big Bluestem
6#	Indiangrass	6#	Indiangrass
4#	Switchgrass	4#	Switchgrass
35#	Rye Grain	25#	German or Browntop Millet
500#	Fertilizer	500#	Fertilizer
4000#	Limestone	4000	Limestone

Approved Creeping Red Fescue Cultivars:

Aberdeen Boreal Epic Cindy Lou

Fertilizer shall be 10-20-20 analysis. A different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis and as directed.

Temporary Seeding

Fertilizer shall be the same analysis as specified for *Seeding and Mulching* and applied at the rate of 400 pounds and seeded at the rate of 50 pounds per acre. German Millet or Browntop Millet shall be used in summer months and rye grain during the remainder of the year. The Engineer will determine the exact dates for using each kind of seed.

Fertilizer Topdressing

Fertilizer used for topdressing shall be 16-8-8 grade and shall be applied at the rate of 500 pounds per acre. A different analysis of fertilizer may be used provided the 2-1-1 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as 16-8-8 analysis and as directed.

Supplemental Seeding

The kinds of seed and proportions shall be the same as specified for *Seeding and Mulching*, and the rate of application may vary from 25# to 75# per acre. The actual rate per acre will be determined prior to the time of topdressing and the Contractor will be notified in writing of the rate per acre, total quantity needed, and areas on which to apply the supplemental seed. Minimum tillage equipment, consisting of a sod seeder shall be used for incorporating seed into the soil as to prevent disturbance of existing vegetation. A clodbuster (ball and chain) may be used where degree of slope prevents the use of a sod seeder.

Mowing

The minimum mowing height shall be 6 inches.

Measurement and Payment

Native Grass *Seeding and Mulching* will be measured and paid for in accordance with Article 1660-8 of the *Standard Specifications*.

STABILIZATION REQUIREMENTS:

(5-1-15) S-4

Stabilization for this project shall comply with the time frame guidelines as specified by the NCG-010000 general construction permit effective August 3, 2011 issued by the North Carolina Department of Environment and Natural Resources Division of Water Quality. Temporary or permanent ground cover stabilization shall occur within 7 calendar days from the last land-disturbing activity, with the following exceptions in which temporary or permanent ground cover shall be provided in 14 calendar days from the last land-disturbing activity:

- Slopes between 2:1 and 3:1, with a slope length of 10 ft. or less
- Slopes 3:1 or flatter, with a slope of length of 50 ft. or less
- Slopes 4:1 or flatter

The stabilization timeframe for High Quality Water (HQW) Zones shall be 7 calendar days with no exceptions for slope grades or lengths. High Quality Water Zones (HQW) Zones are defined by North Carolina Administrative Code 15A NCAC 04A.0105 (25). Temporary and permanent ground cover stabilization shall be achieved in accordance with the provisions in this contract and as directed.

SEEDING AND MULCHING:

(WestEd)

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

Shoulder and Median Areas

August 1 - June 1		May 1 - Se	May 1 - September 1		
20#	Kentucky Bluegrass	20#	Kentucky Bluegrass		
75#	Hard Fescue	75#	Hard Fescue		
25#	Rye Grain	10#	German or Browntop Millet		
500#	Fertilizer	500#	Fertilizer		
4000#	Limestone	4000#	Limestone		

Areas Beyond the Mowing Pattern, Waste and Borrow Areas:

August 1 - June 1		May 1 - September 1		
100#	Tall Fescue	100#	Tall Fescue	
15#	Kentucky Bluegrass	15#	Kentucky Bluegrass	
30#	Hard Fescue	30#	Hard Fescue	
25#	Rye Grain	10#	German or Browntop Millet	
500#	Fertilizer	500#	Fertilizer	
4000#	Limestone	4000#	Limestone	

Approved Tall Fescue Cultivars

06 Dust	Escalade	Justice	Scorpion
2 nd Millennium	Essential	Kalahari	Serengeti
3 rd Millennium		Kalallall Kentucky 31*	Shelby
	Evergreen 2 Falcon IV	Kitty Hawk 2000	Sheridan
Apache III	Falcon NG	•	
Avenger Barlexas		Legitimate	Signia Silver Hawk
	Falcon V	Lexington	
Barlexas II	Faith	LSD	Sliverstar
Bar Fa	Fat Cat	Magellan Matador	Shenandoah Elite
Barrera	Festnova		Sidewinder
Barrington	Fidelity	Millennium SRP	Skyline
Barrobusto	Finelawn Elite	Monet	Solara
Barvado	Finelawn Xpress	Mustang 4	Southern Choice II
Biltmore	Finesse II	Ninja 2	Speedway
Bingo	Firebird	Ol' Glory	Spyder LS
Bizem	Firecracker LS	Olympic Gold	Sunset Gold
Blackwatch	Firenza	Padre	Taccoa
Blade Runner II	Five Point	Patagonia	Tanzania
Bonsai	Focus	Pedigree	Trio
Braveheart	Forte	Picasso	Tahoe II
Bravo	Garrison	Piedmont	Talladega
Bullseye	Gazelle II	Plantation	Tarheel
Cannavaro	Gold Medallion	Proseeds 5301	Terrano
Catalyst	Grande 3	Prospect	Titan ltd
Cayenne	Greenbrooks	Pure Gold	Titanium LS
Cessane Rz	Greenkeeper	Quest	Tracer
Chipper	Gremlin	Raptor II	Traverse SRP
Cochise IV	Greystone	Rebel Exeda	Tulsa Time
Constitution	Guardian 21	Rebel Sentry	Turbo
Corgi	Guardian 41	Rebel IV	Turbo RZ
Corona	Hemi	Regiment II	Tuxedo RZ
Coyote	Honky Tonk	Regenerate	Ultimate
Darlington	Hot Rod	Rendition	Venture
Davinci	Hunter	Rhambler 2 SRP	Umbrella
Desire	Inferno	Rembrandt	Van Gogh
Dominion	Innovator	Reunion	Watchdog
Dynamic	Integrity	Riverside	Wolfpack II
Dynasty	Jaguar 3	RNP	Xtremegreen
Endeavor	Jamboree	Rocket	
		11001100	

^{*}Note: Kentucky 31 will no longer be an approved NCDOT Tall Fescue Cultivar after December 31, 2015.

Approved Kentucky Bluegrass Cultivars:

4-Season	Blue Velvet	Gladstone	Quantum Leap
Alexa II	Blueberry	Granite	Rambo
America	Boomerang	Hampton	Rhapsody
Apollo	Brilliant	Harmonie	Rhythm
Arcadia	Cabernet	Impact	Rita
Aries	Champagne	Jefferson	Royce
Armada	Champlain	Juliet	Rubicon
Arrow	Chicago II	Jump Start	Rugby II
Arrowhead	Corsair	Keeneland	Shiraz
Aura	Courtyard	Langara	Showcase
Avid	Delight	Liberator	Skye
Award	Diva	Madison	Solar Eclipse
Awesome	Dynamo	Mercury	Sonoma
Bandera	Eagleton	Midnight	Sorbonne
Barduke	Emblem	Midnight II	Starburst
Barnique	Empire	Moon Shadow	Sudden Impact
Baroness	Envicta	Moonlight SLT	Total Eclipse
Barrister	Everest	Mystere	Touche
Barvette HGT	Everglade	Nu Destiny	Tsunami
Bedazzled	Excursion	NuChicago	Unique
Belissimo	Freedom II	NuGlade	Valor
Bewitched	Freedom III	Odyssey	Voyager II
Beyond	Front Page	Perfection	Washington
Blacksburg II	Futurity	Pinot	Zinfandel
Blackstone	Gaelic	Princeton 105	
Blue Note	Ginney II	Prosperity	

Approved Hard Fescue Cultivars:

Aurora II	Eureka II	Oxford	Scaldis II
Aurora Gold	Firefly	Reliant II	Spartan II
Berkshire	Granite	Reliant IV	Stonehenge
Bighorn GT	Heron	Rescue 911	
Chariot	Nordic	Rhino	

On cut and fill slopes 2:1 or steeper add 20# Sericea Lespedeza and 15# Crown Vetch January 1 - December 31.

The Crown Vetch Seed should be double inoculated if applied with a hand seeder. Four times the normal rate of inoculant should be used if applied with a hydroseeder. If a fertilizer-seed slurry is used, the required limestone should also be included to prevent fertilizer acidity from killing the inoculant bacteria. Caution should be used to keep the inoculant below 80° F to prevent harm to the bacteria. The rates and grades of fertilizer and limestone shall be the same as specified for *Seeding and Mulching*.

Fertilizer shall be 10-20-20 analysis. A different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis and as directed.

RESPONSE FOR EROSION CONTROL:

Description

Furnish the labor, materials, tools and equipment necessary to move personnel, equipment, and supplies to the project necessary for the pursuit of any or all of the following work as shown herein, by an approved subcontractor.

Section	Erosion Control Item	Unit
1605	Temporary Silt Fence	LF
1606	Special Sediment Control Fence	LF/TON
1615	Temporary Mulching	ACR
1620	Seed - Temporary Seeding	LB
1620	Fertilizer - Temporary Seeding	TN
1631	Matting for Erosion Control	SY
SP	Coir Fiber Mat	SY
1640	Coir Fiber Baffles	LF
SP	Permanent Soil Reinforcement Mat	SY
1660	Seeding and Mulching	ACR
1661	Seed - Repair Seeding	LB
1661	Fertilizer - Repair Seeding	TON
1662	Seed - Supplemental Seeding	LB
1665	Fertilizer Topdressing	TON
SP	Safety/Highly Visible Fencing	LF
SP	Response for Erosion Control	EA

Construction Methods

Provide an approved subcontractor who performs an erosion control action as described in the NPDES Inspection Form SPPP30. Each erosion control action may include one or more of the above work items.

Measurement and Payment

Response for Erosion Control will be measured and paid for by counting the actual number of times the subcontractor moves onto the project, including borrow and waste sites, and satisfactorily completes an erosion control action described in Form 1675. The provisions of Article 104-5 of the Standard Specifications will not apply to this item of work.

Payment will be made under:

Pay Item Pay Unit

Response for Erosion Control

Each

SILT FENCE WATTLE BREAK:

(8-21-12)

1605,1630

Description

Silt fence wattle breaks are tubular products consisting of excelsior fibers encased in synthetic netting and used in conjunction with temporary silt fence at the toe of fills to intercept runoff. Silt fence wattle breaks are to be placed at locations shown on the plans or as directed. Installation shall follow the detail provided in the plans and as directed. Work includes furnishing materials, installation, maintenance and removing silt fence wattle breaks.

Materials

Wattle shall meet the following specifications:

100% Curled Wood (Excelsior) Fibers			
Minimum Diameter 12"			
Minimum Length	10 ft		
Minimum Density	2.5 lb/cf ± 10%		
Net Material	Synthetic		
Net Openings	1" x 1"		
Net Configuration	Totally Encased		
Minimum Weight	20 lb. ± 10% per 10 ft length		

Stakes shall be used as anchors. Provide hardwood stakes a minimum of 2-ft long with a 2" x 2" nominal square cross section. One end of the stake shall be sharpened or beveled to facilitate driving down into the underlying soil.

Provide staples made of 0.125" diameter new steel wire formed into a U-shape not less than 12" in length with a throat of 1" in width.

Construction Methods

Excavate a trench the entire length of each wattle with a depth of 1" to 2" for the wattle to be placed. Secure silt fence wattle breaks to the soil by wire staples approximately every linear foot and at the end of each wattle. Install at least 4 stakes on the downslope side of the wattle with a maximum spacing of 2 linear feet, and according to the detail. Install at least 2 stakes on the

upslope side of the silt fence wattle break according to the detail provided in the plans. Drive stakes into the ground at least 10" with no more than 2" projecting from the top of the wattle. Drive stakes at an angle according to the detail provided in the plans.

Install temporary silt fence in accordance with Section 1605 of the 2012 Standard Specifications and overlap each downslope side of silt fence wattle break by 6".

Maintain the silt fence wattle breaks until the project is accepted or until the silt fence wattle breaks are removed, and remove and dispose of silt accumulations at the silt fence wattle breaks when so directed in accordance with Section 1630 of the 2012 Standard Specifications.

Measurement and Payment

Wattle will be measured and paid as the actual number of linear feet of wattles installed and accepted. Such price and payment will be full compensation for all work covered by this provision, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to install the silt fence wattle break.

Payment will be made under:

Pay ItemPay UnitWattleLinear Foot

STOCKPILE AREAS:

The Contractor shall install and maintain erosion control devices sufficient to contain sediment around any erodible material stockpile areas as directed.

ACCESS AND HAUL ROADS:

At the end of each working day, the Contractor shall install or re-establish temporary diversions or earth berms across access/haul roads to direct runoff into sediment devices. Silt fence sections that are temporarily removed shall be reinstalled across access/haul roads at the end of each working day.

WASTE AND BORROW SOURCES:

Payment for temporary erosion control measures, except those made necessary by the Contractor's own negligence or for his own convenience, will be paid for at the appropriate contract unit price for the devices or measures utilized in borrow sources and waste areas.

No additional payment will be made for erosion control devices or permanent seeding and mulching in any commercial borrow or waste pit. All erosion and sediment control practices that may be required on a commercial borrow or waste site will be done at the Contractor's expense.

All offsite Staging Areas, Borrow and Waste sites shall be in accordance with "Borrow and Waste Site Reclamation Procedures for Contracted Projects" located at:

http://www.ncdot.gov/doh/operations/dp_chief_eng/roadside/fieldops/downloads/Files/ContractedReclamationProcedures.pdf

All forms and documents referenced in the "Borrow and Waste Site Reclamation Procedures for Contracted Projects" shall be included with the reclamation plans for offsite staging areas, and borrow and waste sites.

WATTLE:

Description

Wattles are tubular products consisting of excelsior fibers encased in synthetic netting. Wattles are used on slopes or channels to intercept runoff and act as a velocity break. Wattles are to be placed at locations shown on the plans or as directed. Installation shall follow the detail provided in the plans and as directed. Work includes furnishing materials, installation of wattles, matting installation, and removing wattles.

Materials

Wattle shall meet the following specifications:

100% Curled Wood (Excelsior) Fibers

Minimum Diameter 12 in.

Minimum Density $2.5 \text{ lb/ft}^3 +/- 10\%$

Net MaterialSyntheticNet Openings1 in. x 1 in.Net ConfigurationTotally Encased

Minimum Weight 20 lb. +/- 10% per 10 ft. length

Anchors: Stakes shall be used as anchors.

Wooden Stakes:

Provide hardwood stakes a minimum of 2-ft. long with a 2 in. x 2 in. nominal square cross section. One end of the stake must be sharpened or beveled to facilitate driving down into the underlying soil.

Matting shall meet the requirements of Article 1060-8 of the *Standard Specifications*, or shall meet specifications provided elsewhere in this contract.

Provide staples made of 0.125" diameter new steel wire formed into a u shape not less than 12" in length with a throat of 1" in width.

Construction Methods

Wattles shall be secured to the soil by wire staples approximately every 1 linear foot and at the end of each section of wattle. A minimum of 4 stakes shall be installed on the downstream side of the wattle with a maximum spacing of 2 linear feet along the wattle, and according to the detail. Install a minimum of 2 stakes on the upstream side of the wattle according to the detail provided in the plans. Stakes shall be driven into the ground a minimum of 10 in. with no more than 2 in. projecting from the top of the wattle. Drive stakes at an angle according to the detail provided in the plans.

Only install wattle(s) to a height in ditch so flow will not wash around wattle and scour ditch slopes and according to the detail provided in the plans and as directed. Overlap adjoining sections of wattles a minimum of 6 in.

Installation of matting shall be in accordance with the detail provided in the plans, and in accordance with Article 1631-3 of the *Standard Specifications*, or in accordance with specifications provided elsewhere in this contract.

The Contractor shall maintain the wattles until the project is accepted or until the wattles are removed, and shall remove and dispose of silt accumulations at the wattles when so directed in accordance with the requirements of Section 1630 of the *Standard Specifications*.

Measurement and Payment

Wattle will be measured and paid for by the actual number of linear feet of wattles which are installed and accepted. Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to install the Wattle.

Matting will be measured and paid for in accordance with Article 1631-4 of the *Standard Specifications*, or in accordance with specifications provided elsewhere in this contract.

Payment will be made under:

Pay Item

Wattle

Linear Foot

Page: 1 of 6

Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid
			ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum LS	40,000.00	40,000.00
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum LS	25,000.00	25,000.00
0003	0001000000-E	200	CLEARING & GRUBBING ACRE(S)	Lump Sum LS	60,000.00	60,000.00
0004	0036000000-E	225	UNDERCUT EXCAVATION	300 CY	12.00	3,600.00
0005	0106000000-E	230	BORROW EXCAVATION	27,000 CY	6.00	162,000.00
0006	0134000000-E	240	DRAINAGE DITCH EXCAVATION	500 CY	8.00	4,000.00
0007	0141000000-E	240	BERM DITCH CONSTRUCTION	300 LF	8.00	2,400.00
0008	0156000000-E	250	REMOVAL OF EXISTING ASPHALT PAVEMENT	6,994 SY	2.50	17,485.00
0009	0222000000-E	SP	GEOTEXTILE FOR ROCK EMBANK- MENTS	100 SY	10.00	1,000.00
0010	0318000000-E	300	FOUNDATION CONDITIONING MATE- RIAL, MINOR STRUCTURES	15 TON	30.00	450.00
0011	0335300000-E	305	18" DRAINAGE PIPE	762 LF	30.00	22,860.00
0012	0335400000-E	305	24" DRAINAGE PIPE	200 LF	35.00	7,000.00
0013	0453000000-E	310	**" PIPE END SECTION (18)	1 EA	2,000.00	2,000.00
0014	0453000000-E	310	**" PIPE END SECTION (24)	1 EA	2,500.00	2,500.00
0015	0995000000-E	340	PIPE REMOVAL	40 LF	10.00	400.00
0016	1011000000-N		FINE GRADING	 Lump Sum LS	30,000.00	30,000.00
0017	1121000000-E	520	AGGREGATE BASE COURSE	8,702 TON	24.00	208,848.00
0018	1220000000-E	545	INCIDENTAL STONE BASE	135 TON	30.00	4,050.00
0019	1245000000-E	SP	SHOULDER RECONSTRUCTION	0.94 SMI	15,000.00	14,100.00
0020	1330000000-E	607	INCIDENTAL MILLING	420 SY	5.00	2,100.00

Page: 2 of 6

		Contract Item Sheets For DN00455						
Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid		
0021	1489000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0B	3,380 TON	60.00	202,800.00		
0022	1498000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	3,100 TON	56.00	173,600.00		
0023	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	2,619 TON	64.00	167,616.00		
0024	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	443 TON	385.00	170,555.00		
0025	1693000000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	100 TON	175.00	17,500.00		
0026	2275000000-E	SP	FLOWABLE FILL	50 CY	150.00	7,500.00		
0027	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	13 EA	1,600.00	20,800.00		
0028	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	2 EA	600.00	1,200.00		
0029	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	5 EA	600.00	3,000.00		
0030	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	5 EA	600.00	3,000.00		
0031	2549000000-E	846	2'-6" CONCRETE CURB & GUTTER	1,410 LF	25.00	35,250.00		
0032	2655000000-E	852	5" MONOLITHIC CONCRETE ISLANDS (KEYED IN)	2,170 SY	48.00	104,160.00		
0033	2657000000-E	852	**" MONOLITHIC CONCRETE MEDIAN (****) (5", KEYED IN)	600 SY	50.00	30,000.00		
0035	2845000000-N	858	ADJUSTMENT OF METER BOXES OR VALVE BOXES	5 EA	250.00	1,250.00		
0036	3030000000-E	862	STEEL BM GUARDRAIL	50 LF	50.00	2,500.00		
0037	3270000000-N	SP	GUARDRAIL ANCHOR UNITS, TYPE 350	2 EA	3,000.00	6,000.00		
0038	3500000000-E	866	WOVEN WIRE FENCE, **" FABRIC (48)	782 LF	4.00	3,128.00		

Page: 3 of 6

	Contract Item Sheets For DN00455						
Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid	
0039	3509000000-E	866	4" TIMBER FENCE POSTS, 7'-6" LONG	100 EA	25.00	2,500.00	
0040	3515000000-E	866	5" TIMBER FENCE POSTS, 8'-0" LONG	8 EA	40.00	320.00	
0041	3566000000-E	867	WOVEN WIRE FENCE RESET	1,556 LF	8.00	12,448.00	
0042	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	81 SY	10.00	810.00	
0043	4096000000-N	904	SIGN ERECTION, TYPE D	4 EA	150.00	600.00	
0044	4102000000-N	904	SIGN ERECTION, TYPE E	4 EA	100.00	400.00	
0045	4108000000-N	904	SIGN ERECTION, TYPE F	4 EA	100.00	400.00	
0046	440000000-E	1110	WORK ZONE SIGNS (STATIONARY)	72 SF	10.00	720.00	
0047	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	150 SF	8.50	1,275.00	
0048	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	420 SF	5.00	2,100.00	
0049	4420000000-N	1120	PORTABLE CHANGEABLE MESSAGE SIGN	2 EA	5,000.00	10,000.00	
0050	4435000000-N	1135	CONES	50 EA	25.00	1,250.00	
0051	4445000000-E		BARRICADES (TYPE III)	180 LF	25.00	4,500.00	
0052	4455000000-N		FLAGGER	40 DAY	350.00	14,000.00	
0053	4650000000-N	1251	TEMPORARY RAISED PAVEMENT MARKERS	300 EA	12.00	3,600.00	
0054	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	400 LF	6.00	2,400.00	
0055	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	11 EA	300.00	3,300.00	
0056	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	61,281 LF	0.20	12,256.20	
0057	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	104 LF	10.00	1,040.00	

Page: 4 of 6

	Contract Item Sheets For DN00455						
Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid	
0058	4905000000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	40 EA	100.00	4,000.00	
0059	4915000000-E	1264	7' U-CHANNEL POSTS	120 EA	50.00	6,000.00	
0060	6000000000-E	1605	TEMPORARY SILT FENCE	3,300 LF	4.00	13,200.00	
0061	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	20 TON	45.00	900.00	
0062	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	100 TON	45.00	4,500.00	
0063	6012000000-E	1610	SEDIMENT CONTROL STONE	100 TON	40.00	4,000.00	
0064	6015000000-E	1615	TEMPORARY MULCHING	1 ACR	1,200.00	1,200.00	
0065	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	200 LB	7.00	1,400.00	
0066	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEED- ING	100 TON	10.00	1,000.00	
0067	6024000000-E	1622	TEMPORARY SLOPE DRAINS	100 LF	25.00	2,500.00	
0068	6030000000-E	1630	SILT EXCAVATION	650 CY	6.00	3,900.00	
0069	6036000000-E	1631	MATTING FOR EROSION CONTROL	7,000 SY	2.00	14,000.00	
0070	6037000000-E	SP	COIR FIBER MAT	160 SY	10.00	1,600.00	
0071	6042000000-E		1/4" HARDWARE CLOTH	200 LF	10.00	2,000.00	
0072	6071010000-E	SP	WATTLE	99 LF	22.00	2,178.00	
0073	6084000000-E	1660	SEEDING & MULCHING	4.25 ACR	1,800.00	7,650.00	
0074	6087000000-E	1660	MOWING	4 ACR	300.00	1,200.00	
0075	6090000000-E	1661	SEED FOR REPAIR SEEDING	50 LB	15.00	750.00	
0076	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	100 TON	10.00	1,000.00	
0077	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	50 LB	15.00	750.00	

Mar 24, 2016 1:47 pm

North Carolina Department Of Transportation Contract Item Sheets For DN00455

Page: 5 of 6

	Contract Item Sneets For DN00455						
Line #	ItemNumber	Sec #	Description	Quantity Unit	Unit Bid Price	Amount Bid	
0078	6117000000-N	SP	RESPONSE FOR EROSION CONTROL	3 EA	500.00	1,500.00	
0079	7980000000-N	SP	GENERIC SIGNAL ITEM (TEMP SIGNAL - 1 PAIR; PRE-TIM ED OR ACTUATED)	1 EA	10,500.00	10,500.00	

Mar 24, 2016 1:47 pm

ItemNumber

8802030000-E

Line

#

0080

North Carolina Department Of Transportation Contract Item Sheets For DN00455

Page: 6 of 6	
Amount Bid	Unit Bid Price
112,000.00	50.00

TOTAL AMOUNT OF BID FOR ENTIRE PROJECT \$1,831
--

Quantity Unit

2,240

SF

1347/Mar24/Q139620.19/D272293240000/E79

Sec

SP

Description

WALLS

SEGMENTAL GRAVITY RETAINING

NORTH CAROLINA STATE DEPARTMENT OF TRANSPORTATION MBE COMMITMENT ITEMS

DATE:02-26-16 PAGE: 9

PROPOSAL: DN00455

LETTING: L160322N CALL: 004

VENDOR: 2575 Clary Hood, Inc.

LINE ITEM ITEM UNIT SUBCONTRACTOR SUBCONTRACTOR EXTENDED NO. NO. DESC. TYPE QUANTITY UNIT PRICE AMOUNT ______

MBE SUBCONTRACTOR: 12392 HAMILTON HAULING LLC

Will Use Quote: Yes

0017 1121000000-E AGGREGATE BA TON 5000.000 5.00000 25000.00

MBE COMMITMENT TOTAL FOR SUBCONTRACTOR: 25,000.00

TOTAL MBE COMMITMENT FOR VENDOR:

Entered: 1.37% or 25000.00 Required: 1.00% or 18312.99

<GOAL MET>

Check: 4D5AE225 Page 9

NORTH CAROLINA STATE DEPARTMENT OF TRANSPORTATION DATE:02-26-16 WBE COMMITMENT ITEMS

PAGE: 10

PROPOSAL: DN00455

LETTING: L160322N CALL: 004

VENDOR: 2575 Clary Hood, Inc.

						.
LINE ITEM NO. NO.	ITEM DESC.		SUBCONTRACTOR			EXTENDED
NO. NO.	DESC.	TYPE	QUANTITY	UNIT PRI	CE	AMOUNT
WBE SUBCONTRACTOR:	5319 NEW DIM	ENSIO	NS IN PAVEMENT	MARKINGS	INC	
Will Use Quote: Ye	S					
0053 4650000000-N	TEMP RAISED	EΑ	300.000	10.	00000	3000.00
0054 4685000000-Е	THERMO PVT M	$_{ m LF}$	400.000	5.	00000	2000.00
0055 4725000000-E	THERMO PVT S	EA	11.000	125.	00000	1375.00
0056 4810000000-E	PAINT PVMT M	$_{ m LF}$				9192.15
0057 4835000000-E	PAINT PVT MK		104.000		00000	520.00
0058 4905000000-N	SNOWPLB PVMT	EA	40.000	85.	00000	3400.00
WBE COMMITME	NT TOTAL FOR	SUBCO	NTRACTOR:		19	,487.15
WBE SUBCONTRACTOR: Will Use Quote: Ye		ION CO	ONSTRUCTION INC			
0038 3500000000-Е	WOVEN WIRE F	LF	782.000	3.	75000	2932.50
0039 3509000000-E	4" TIMBER PO	EA	100.000	20.	00000	2000.00
0040 3515000000-E	5" TIMBER PO	EΑ	8.000	35.	00000	280.00
0041 3566000000-Е	WOVEN WIRE F	$_{ m LF}$	1556.000	7.	50000	11670.00
0036 3030000000-E	STL BM GUARD	$_{ m LF}$	50.000	26.	00000	1300.00
0037 3270000000-N	GR ANCHOR TY	EA	2.000	2400.	00000	4800.00
WBE COMMITME	NT TOTAL FOR S	SUBCON	NTRACTOR:		22	,982.50
TOTAL UPP CONSTRUCT	NE 505 HENGE			0.00		
TOTAL WBE COMMITME	NT FOR VENDOR	•				42469.65
			Required:	2.00	% or	
					<goa< td=""><td>L MET></td></goa<>	L MET>

Check: 4D5AE225 Page 10

This Bid contains	2 amendment files						
00001 03-01-16 INCREASED QUANTITY OF PAY ITEM # 2655000000-E 00002 03-16-16 QTY INCREASES FOR LINE # 0008 AND # 0021							
I Hereby certify t	that I have the authority to su	bmit this bid.	A POST				
Signature	Agency	Date					
PAI-L	CLARY 1100D	INC. 3-22.	-16				

CONTRACT:

DN00455

LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR

NAME OF BIDDER:

Clary Hood, Inc.

•	nt award of contract by the Boa		[amilton Haul	ing. LLC	
	E/WBE/DBE Subcontractor			,	
Address		21 Dogwood l			
City	Candler	State	NC	Zip_	28715
	Pleas	e check all that	apply:		
	Minority Bus	siness Enterpris	e (MBE) 🗸		
	Women Bus	iness Enterprise	e (WBE)		
	Disadvantaged	Business Enterp	orise (DBE) _		
isted on the a upon execution named subcon Subcontractor pelow.	f Transportation. The above na attached MBE/WBE/DBE Cor on of the bid and subsequent a attractor is prepared to perform Price identified on the MBE	nmitment Items ward of contra- the described /WBE/DBE Co	s sheet, in come of by the Board work at the es immitment Iter	nection with d of Transpatimated Co ms sheet ar	n the above contract portation. The above emmitment Total for and amount indicated
	Total based on estimated Un Items sheet. Amount \$ 25,00		uantities on th	he "attache	d" MBE/WBE/DBE
Unit Prices and will vary up of work perform entire dollar and/or other f	amed bidder and subcontractor and Quantities. This commitment of down as the project is completed and accepted during the parmount quoted based on these forms of non-written representations.	nt total is based eted. Final com- bursuance of we estimated qua- tions shall serve	I on estimated apensation will ork. The above tities. No content to add, delete	quantities of the based of the based of the listed are niversations of modify	only and most likely a actual quantities of nount represents the , verbal agreements the terms as stated.
subcontractor	nt shall not serve in any manne agreement will describe in OBE subcontractor.	r as an actual su detail the co	ibcontract betw ntractual oblig	veen the two gations of	o parties. A separate the bidder and the
Affirmation					
	amed MBE/ WBE/ DBE sub- ne estimated dollar value as sta		ms that it will	l perform t	he portion(s) of the
Ha	milton Hauling, LLC		Clar	ry Hood, L	ıc
Name of M	BE/ WBE/ DBE Subcontracto	or	Na	me of Bidd	er /
San	When owner		Out 1	2	PRESIO
	Signature / Title		Sig	nature / Tj	de de
	3/23/16			3/22/16	
	2 90 110				

LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR CONTRACT: NAME OF BIDDER: DN00455 Clary Hood, Inc. The undersigned intends to perform work in connection with the above contract upon execution of the bid and subsequent award of contract by the Board of Transportation as: Name of MBE/WBE/DBE Subcontractor **New Dimensions in Pavement Markings** 231 Rutledge Road Address Fletcher NC City 28732 State Zip Please check all that apply: Minority Business Enterprise (MBE) Women Business Enterprise (WBE) ✓ Disadvantaged Business Enterprise (DBE) The MBE /WBE /DBE status of the above named subcontractor is certified by the North Carolina Department of Transportation. The above named subcontractor is prepared to perform the described work listed on the attached MBE/WBE/DBE Commitment Items sheet, in connection with the above contract upon execution of the bid and subsequent award of contract by the Board of Transportation. The above named subcontractor is prepared to perform the described work at the estimated Commitment Total for Subcontractor Price identified on the MBE/WBE/DBE Commitment Items sheet and amount indicated below. Commitment Total based on estimated Unit Prices and Quantities on the "attached" MBE/WBE/DBE Commitment Items sheet. Amount \$ 19,487.15 The above named bidder and subcontractor mutually accepts the Commitment Total estimated for the Unit Prices and Quantities. This commitment total is based on estimated quantities only and most likely will vary up or down as the project is completed. Final compensation will be based on actual quantities of work performed and accepted during the pursuance of work. The above listed amount represents the entire dollar amount quoted based on these estimated quantities. No conversations, verbal agreements, and/or other forms of non-written representations shall serve to add, delete, or modify the terms as stated. This document shall not serve in any manner as an actual subcontract between the two parties. A separate subcontractor agreement will describe in detail the contractual obligations of the bidder and the MBE/WBE/DBE subcontractor. Affirmation The above named MBE/ WBE/ DBE subcontractor affirms that it will perform the portion(s) of the contract for the estimated dollar value as stated above. **New Dimensions in Pavement Markings** Clary Hood, Inc. Name of MBE/ WBE/ DBE Subcontractor Name of Bidder

23-16 Date

Signature / Title

3/22/16

Date

Signature / Title

LETTER OF INTENT TO	PERFORM AS A SUBCONTRACTOR					
CONTRACT: DN00455	NAME OF BIDDER; Clary Hood, Inc.					
The undersigned intends to perform work in con and subsequent award of contract by the Board of	-					
Name of MBE/WBE/DBE Subcontractor	Bullington Construction, Inc.					
1 KW COO	American Drive					
CityOakboro	State NC Zip 28129					
Please ch	neck all that apply:					
-	ess Enterprise (MBE)					
Women Busines	ss Enterprise (WBE)					
Disadvantaged Bus	siness Enterprise (DBE) <u> </u>					
Department of Transportation. The above named subcontractor is prepared to perform the described work listed on the attached MBE/WBE/DBE Commitment Items sheet, in connection with the above contract upon execution of the bid and subsequent award of contract by the Board of Transportation. The above named subcontractor is prepared to perform the described work at the estimated Commitment Total for Subcontractor Price identified on the MBE/WBE/DBE Commitment Items sheet and amount indicated below. Commitment Total based on estimated Unit Prices and Quantities on the "attached" MBE/WBE/DBE						
Commitment Items sheet. Amount \$ 22,982.5						
The above named bidder and subcontractor mutually accepts the Commitment Total estimated for the Unit Prices and Quantities. This commitment total is based on estimated quantities only and most likely will vary up or down as the project is completed. Final compensation will be based on actual quantities of work performed and accepted during the pursuance of work. The above listed amount represents the entire dollar amount quoted based on these estimated quantities. No conversations, verbal agreements, and/or other forms of non-written representations shall serve to add, delete, or modify the terms as stated. This document shall not serve in any manner as an actual subcontract between the two parties. A separate subcontractor agreement will describe in detail the contractual obligations of the bidder and the						
MBE/WBE/DBE subcontractor.						
Affirmation						
The above named MBE/ WBE/ DBE subcont contract for the estimated dollar value as stated a	ractor affirms that it will perform the portion(s) of the above.					
Bullington Construction, Inc.	Clary Hood, Inc.					
Name of MBE/ WBE/ DBE Subcontractor	Name of Bidder PRESIDENT					
Signature / Title	Signature / Title					
	3/22/16					
Date	Date					

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH, NC

BID BOND

Contract Number:	DN00455	County:	Polk
and SURETY above name sum of five (5) percent of	ed, are held and firmly bound f the total amount bid by the to be made, we bind ourselves,	unto the Department of Principal for the project	RACTOR (hereafter, PRINCIPAL) Transportation in the full and just a stated above, for the payment of ministrators, and successors, jointly
days after the opening of the Board of Transportation is days after written notice of the faithful performance equipment for the prosecut mistake in accordance with the conditions and obligated Transportation makes a fir contract. In the event a declaration days to comply with the ropened except as provide additional documents as making the source of	the bids, or within such other thall award a contract to the Professional award is received by him, profession of the contract and for the provisions of Article 103-ations of this Bid Bond shall hall determination to either allowetermination is made to award the requirements set forth above. In Article 103-3, or after away be required and to provide	ime period as may be principal, the Principal sivide bonds with good at protection of all personne Principal requests per 3 of the <i>Standard Speci</i> remain in full force as we the bid to be withdraw the contract, the Principal In the event the Principal vard of the contract has the required bonds with	withdraw its bid within sixty (60) provided in the proposal, and if the hall, within fourteen (14) calendar and sufficient surety, as required for an supplying labor, material, and emission to withdraw his bid due to fications for Roads and Structures, and effect until the Department of an or to proceed with award of the hall shall have fourteen (14) calendar and withdraws its bid after bids are as been made fails to execute such in the time period specified above, and of Transportation as liquidated
	EOF, the Principal and Surety h	-	s to be duly signed and sealed.
This the day of	, 20		
			Surety
	Ву	Ganaral Agant	or Attorney-in-Fact Signature
		Ocherai Ageni (n Automey-m-ract Signature
Seal	of Surety	D: /	o' la
		Print of	type Signer's Name

ADDENDUM(S)

ADDENDUM #I		
I, A (SIGNATURE)	representing _	Clary Hood, Inc.
Acknowledge receipt of Addendum #1.		
ADDENDUM #2		
I, (SIGNATURE)	representing	Clary Hood, Inc.
Acknowledge receipt of Addendum #2.		
ADDENDUM #3		
I, (SIGNATURE)	representing _	Clary Hood, Inc.
Acknowledge receipt of Addendum #3.		
	PAP	
*** Addendum #4 & #5 also received.***	YHY)	



March 1, 2016

ADDENDUM # 1

To: Plan Holders

From: Wanda H. Austin, P.E.

Division 14 Contract Officer

RE: Pay Item Change and Roadway Special Provision Revision

Contract ID: DN00455 County: Polk

Letting Date: March 22, 2016

The above contract has experienced the following changes:

W)Q

- Page G-7, replace the existing completion date with **July 20, 2016**.
- On page T-1, pay item # 2766000000-N, GENERIC PAVING ITEM, 1 LS has been removed, and pay item # 2655000000-E, 5" MONOLITHIC CONCRETE ISLANDS (KEYED IN), 1,400 SY has experienced a quantity increase of 770 SY, for a total of 2,170 SY.
- Page G-35, replace the first sentence with the following:

Contractor shall not begin the Pea Ridge Road Option #1 Realignment Phase, prior to April 18, 2016. The limits of this phase are as follows: SR 1326 (Pea Ridge Rd), from approximately Station -L- 4+50 to Station -L- 19+09.14.

Please insert this letter and the attached pay item sheet, T-1, into the addendum section of the proposal and sign the verification. Thank you for your attention to this matter.

Mar 01, 2016 3:14 pm

ITEMIZED PROPOSAL FOR CONTRACT NO. DN00455

Page 1 of 5

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
		R	ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum	L.S.	
0003	0001000000-E	200	CLEARING & GRUBBING ACRE(S)	Lump Sum	L.S.	
0004	0036000000-E	225	UNDERCUT EXCAVATION	300 CY		
0005	0106000000-E	230	BORROW EXCAVATION	27,000 CY		
0006	0134000000-E	240	DRAINAGE DITCH EXCAVATION	500 CY		
0007	0141000000-E	240	BERM DITCH CONSTRUCTION	300 LF		
0008	0156000000-E	250	REMOVAL OF EXISTING ASPHALT PAVEMENT	6,189 SY		
0009	0222000000-E	SP	GEOTEXTILE FOR ROCK EMBANK- MENTS	100 SY		
0010	0318000000-Е	300	FOUNDATION CONDITIONING MATE- RIAL, MINOR STRUCTURES	15 TON		
0011	0335300000-E	305	18" DRAINAGE PIPE	762 LF		
0012	0335400000-E	305	24" DRAINAGE PIPE	200 LF		
0013	0453000000-E	310	**" PIPE END SECTION (18)	1 EA		
0014	0453000000-E	310	**" PIPE END SECTION (24)	1 EA		
0015	0995000000-E	340	PIPE REMOVAL	40 LF		
0016	1011000000-N	500	FINE GRADING	Lump Sum	L.S.	
0017	1121000000-E	520	AGGREGATE BASE COURSE	8,702 TON		
0018	1220000000-E	545	INCIDENTAL STONE BASE	135 TON		
0019	1245000000-E	SP	SHOULDER RECONSTRUCTION	0.94 SMI		

County: Polk

Sec Description Quantity **Unit Cost** Line Item Number **Amount** 0020 1330000000-E 607 INCIDENTAL MILLING 420 SY 0021 1489000000-E 610 ASPHALT CONC BASE COURSE, TYPE 2,930 B25.0B TON 0022 1498000000-E ASPHALT CONC INTERMEDIATE 610 3,100 COURSE, TYPE I19.0B TON ASPHALT CONC SURFACE COURSE, 0023 1519000000-E 610 2,619 TYPE S9.5B TON 0024 1575000000-E 620 ASPHALT BINDER FOR PLANT MIX 443 TON 0025 1693000000-E 654 ASPHALT PLANT MIX, PAVEMENT 100 **REPAIR** TON SP FLOWABLE FILL 0026 2275000000-E 50 CY 840 MASONRY DRAINAGE STRUCTURES 0027 2286000000-N 13 EΑ 0028 2374000000-N 840 FRAME WITH GRATE & HOOD, STD 2 840.03, TYPE ** EΑ (E) 0029 2374000000-N FRAME WITH GRATE & HOOD, STD 840 5 840.03, TYPE ** EΑ (F) 0030 2374000000-N 840 FRAME WITH GRATE & HOOD, STD 5 840.03, TYPE ** EΑ (G) 0031 2549000000-E 2'-6" CONCRETE CURB & GUTTER 1,410 846 LF 0032 2655000000-E 5" MONOLITHIC CONCRETE ISLANDS 2,170 (KEYED IN) SY **" MONOLITHIC CONCRETE MEDIAN 0033 2657000000-E 852 600 SY (5", KEYED IN) 0035 2845000000-N ADJUSTMENT OF METER BOXES OR 5 VALVE BOXES EΑ 0036 3030000000-E 862 STEEL BM GUARDRAIL 50 LF 0037 3270000000-N SP GUARDRAIL ANCHOR UNITS, TYPE 2 EΑ

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0038	3500000000-Е	866	WOVEN WIRE FENCE, **" FABRIC (48)	782 LF		
0039	3509000000-E	866	4" TIMBER FENCE POSTS, 7'-6" LONG	100 EA		
0040	3515000000-Е	866	5" TIMBER FENCE POSTS, 8'-0" LONG	8 EA		
0041	3566000000-E	867	WOVEN WIRE FENCE RESET	1,556 LF		
0042	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	81 SY		
0043	4096000000-N	904	SIGN ERECTION, TYPE D	4 EA		
0044	4102000000-N	904	SIGN ERECTION, TYPE E	4 EA		
0045	4108000000-N	904	SIGN ERECTION, TYPE F	4 EA		
0046	440000000-E	1110	WORK ZONE SIGNS (STATIONARY)	72 SF		
0047	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	150 SF		
0048	441000000-Е	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	420 SF		
0049	4420000000-N	1120	PORTABLE CHANGEABLE MESSAGE SIGN	2 EA		
0050	4435000000-N	1135	CONES	50 EA		
0051	4445000000-E	1145	BARRICADES (TYPE III)	180 LF		
0052	4455000000-N	1150	FLAGGER	40 DAY		
0053	4650000000-N	1251	TEMPORARY RAISED PAVEMENT MARKERS	300 EA		
0054	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	400 LF		
0055	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	11 EA		

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0056	4810000000-Е	1205	PAINT PAVEMENT MARKING LINES (4")	61,281 LF		
0057	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	104 LF		
0058	4905000000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	40 EA		
0059	4915000000-E	1264	7' U-CHANNEL POSTS	120 EA		
0060	6000000000-E	1605	TEMPORARY SILT FENCE	3,300 LF		
0061	6006000000-Е	1610	STONE FOR EROSION CONTROL, CLASS A	20 TON		
0062	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	100 TON		
0063	6012000000-E	1610	SEDIMENT CONTROL STONE	100 TON		
0064	6015000000-E	1615	TEMPORARY MULCHING	1 ACR		
0065	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	200 LB		
0066	6021000000-Е	1620	FERTILIZER FOR TEMPORARY SEED- ING	100 TON		
0067	6024000000-E	1622	TEMPORARY SLOPE DRAINS	100 LF		
0068	6030000000-Е	1630	SILT EXCAVATION	650 CY		
0069	6036000000-E	1631	MATTING FOR EROSION CONTROL	7,000 SY		
0070	6037000000-E	SP	COIR FIBER MAT	160 SY		
0071	6042000000-E	1632	1/4" HARDWARE CLOTH	200 LF		
0072	6071010000-E	SP	WATTLE	99 LF		
0073	6084000000-E	1660	SEEDING & MULCHING	4.25 ACR		
0074	6087000000-E	1660	MOWING	4 ACR		

1514/Mar01/Q138365.19/D272293240000/E79

Page 5 of 5

ITEMIZED PROPOSAL FOR CONTRACT NO. DN00455

County	Polk

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0075	6090000000-E	1661	SEED FOR REPAIR SEEDING	50		
				LB 		
0076	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	100		
				TON		
0077	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	50		
				LB		
0078	6117000000-N	SP	RESPONSE FOR EROSION CONTROL	3		
				EA		
0079	7980000000-N	SP	GENERIC SIGNAL ITEM	 1		
			(TEMP SIGNAL - 1 PAIR; PRE-TIM ED OR ACTUATED)	EA		
		v	VALL ITEMS			
0800	8802030000-E	SP	SEGMENTAL GRAVITY RETAINING WALLS	2,240 SF		

Total Amount Of Bid For Entire Project :



March 1, 2016

ADDENDUM # 2

To: Plan Holders

From: Jeffrey E. Alspaugh

Division 14 Proposal Engineer

RE: Wall Plans and Letters of Intent Due Date

JEA

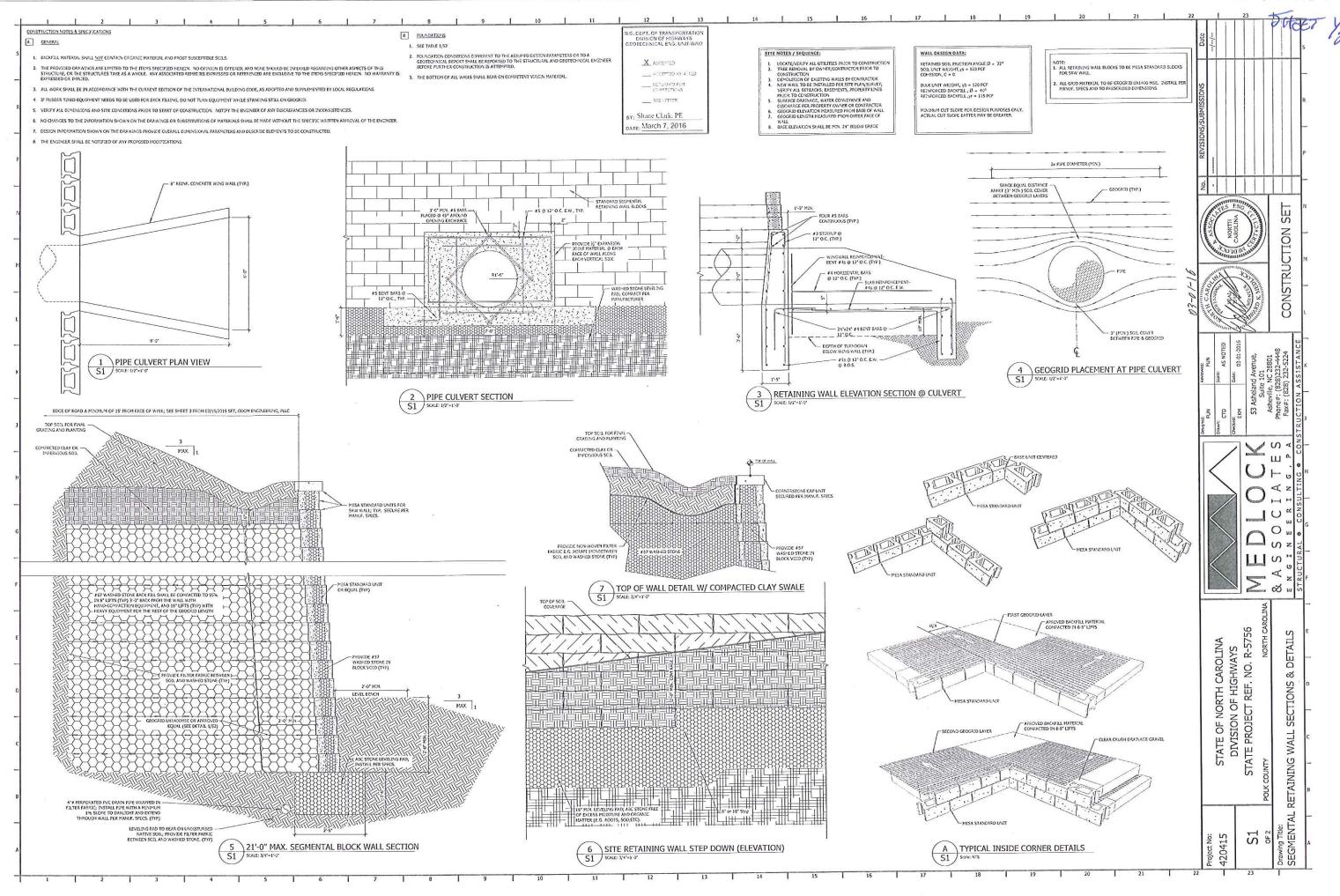
Contract ID: DN00455 County: Polk

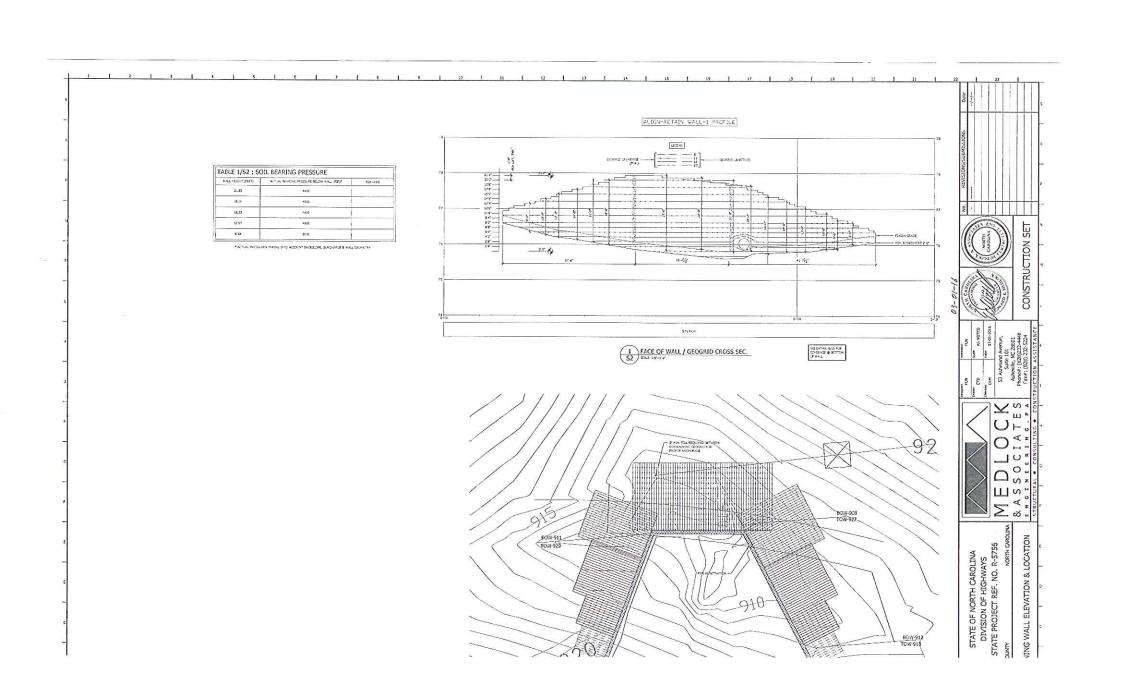
Letting Date: March 22, 2016

The above contract has experienced the following changes:

- Retaining Wall Plans have been added as part of the plan set.
- Letters of Intent are due no later than Noon, Wednesday, March 23, 2016.

Please insert this letter and the attached wall plan sheet into the addendum section of the proposal and sign the verification. Thank you for your attention to this matter.







March 17, 2016

ADDENDUM #3

To: Plan Holders

Wa

From: Wanda H. Austin, P.E.

Division 14 Contract Officer

RE: Questions/Concerns & Answers/Clarifications, Revised

Pay Item List and Revised Typical Section

Contract ID: DN00455 County: Polk

Letting Date: March 22, 2016

A bidder has posed the following questions/concerns regarding the above contract; the answers/clarifications statements to these questions have been provided below:

- QUESTION/CONCERN: "There are only one set of pay items and one set of plans, but it is our understanding that both Option 1 and Option 2 are to be priced. Can you please clarify the bidding procedures for these options?"
- ANSWER/CLARIFICATION: "Incorrect, only Option 1 is to be priced. When Option 2 plans are completed and assuming Option 2 is selected a Supplemental Agreement will be processed for the revision."
- QUESTION/CONCERN: "Is there a summary of quantities for this project?
- ANSWER/CLARIFICATION: "No, this content (Summary of Quantities)
 has been eliminated from projects since 2014; 'ELMINATION OF THE
 SUMMARY OF QUANTITIES SHEET 8-1, starting with the January 21,
 2014 letting, traditional sheet number 3, Summary of Quantities, will
 be eliminated from the let plans. The elimination of this sheet will
 increase the Department's efficiency when electronically signing and
 sealing final plans."
- QUESTION/CONCERN: "There is no pavement section or spec for the 5" monolithic concrete island. Please clarify.



- ANSWER/CLARIFICATION: "The monolithic concrete island does not change. Previously, we had listed the roundabout as a lump sum pay item. Now, the roundabout is indicated as pay item 2655000000-E 5" Monolithic Concrete Islands (Keyed In)(Roundabout). Reference NCDOT Std Dwg 852.01, as well as Section 852 Traffic Islands and Medians in the 2012 Standard Specifications for Roads and Structures."
- QUESTION/CONCERN: "On the overall sheet and sheet 5A, plans show areas of asphalt removal for John Shehan Road that stop at the new layout connection, however the profiles sheets indicate this roadway is coming out. Please clarify that this entire roadway is to be removed to the limits of the new pavement typical section at station 12+64.93."
- ANSWER/CLARIFICATION: "Only the asphalt is to be removed.
 Roadbed to be removed by grading company for TIEC, under separate
 project. TIEC will grade the area at a later date."
- QUESTION/CONCERN: "Plans do not indicate any asphalt removal with the Pea Ridge Road right-of-way that is to be vacated.
 - o Please clarify is this to be removed or if it will remain.
 - o If removal is to be included, the pay item for the asphalt removal appears insufficient."
- ANSWER/CLARIFICATION: "Asphalt in Pea Ridge Rd to remain and be removed by grading contractor for TIEC, under separate project."
- QUESTION/CONCERN: "Is there a soils report available showing the existing pavement section for John Shehan Road and Pea Ridge Road?"
- ANSWER/CLARIFICATION: "No soils report available."
- QUESTION/CONCERN: "It appears that during construction of the round-a-bout certain areas may require temporary paving to maintain traffic. If required, how is this to be paid for?"
- ANSWER/CLARIFICATION: "The entire footprint will be binder. Then traffic will be shifted in quadrants for island and roundabout



construction. The revised typical section (see attached) address some of this concept. Bottom line - the 'temporary asphalt' is included in the B25.0B quantities."

- QUESTION/CONCERN: "The Traffic Control Plan does not appear to account for construction of portions of John Shehan Road or Pea Ridge Road or the construction of Ramp 'A'. Is a revised TCP forthcoming? Please clarify."
- ANSWER/CLARIFICATION: "The plans have been modified and quantities include 3" B25.0B under the earthen roundabout area for traffic control purposes. The B25.0B quantity has been adjusted to 3380 tons. The line item 0156000000-E Removal of Existing Asphalt Pavement has been increased from 6189 square yards by 805 square yards for a new total of 6994 square yards so that the 3" of B25.0B can be removed from the earthen island area."
- QUESTION/CONCERN: "On Sheet 2 the Typical Section @ Round-A-Bout has a pavement section of 2" S9.5B, 3" I19.0B, and 5" B25.0B. Beneath this detail is a note that state 'Typical Phase 1-6 Pavement Section'.
 - O Phase 1-4 include the round-a-bout as well as all the Ramp A & B construction, all of Pea Ridge Road north of the round-a-bout, and portions of Pea Ridge Road south and John Shehan Road to the bike path. Can you please confirm the intent was to use this section for these areas and not just the 18' thru lane of the round-a-bout?
 - Phase 5-6 include areas where Pea Ridge Road south and John Shehan Road tie into existing roads, and include 4' bike paths. Please clarify which typical is to be used in these tie-in locations."
- ANSWER/CLARIFICATION: "The intent was to provide an asphalt surface beneath the roundabout to implement the TCP. A revised sheet 2 is forthcoming"
- QUESTION/CONCERN: "On Sheet 2 the Typical Section #3 is indicated for the 4' bike path which has a pavement section of 2" S9.5B, I19.0B, and 11" ABC. There are certain locations on both Pea Ridge and John Shehan Roads where it appears the bike path stops for turn outs and/or turn lanes. Please



clarify which typical is to be used in the instances, #1 or #3."

• ANSWER/CLARIFICATION: "The travel lane typical should remain the same. The bicycle lane typical terminates in the locations shown on the plans. At these locations, the bicycle lane is replaced with earthen shoulder."

Pay Item Changes:

See attached revised Pay Item Sheet.

- Line # 0008, 0156000000-E REMOVAL OF EXISTING ASPHALT PAVEMENT increased from 6189 square yards by 805 square yards for a new total of 6994 square yards.
- Line # 0021, Item Number 1489000000-E, ASPHALT CONC BASE COURSE, TYPE B25.0B quantity has been increased from 2,930 tons to 3380 tons.

Revised Plan Sheet # 2, Typical Section

See attached revised plan sheet # 2.

Please insert this letter, the attached revised pay item sheets, and the attached revised plan sheet into the addendum section of the proposal and sign the verification. Thank you for your attention to this matter.

Mar 16, 2016 3:51 pm

County: Polk

ITEMIZED PROPOSAL FOR CONTRACT NO. DN00455

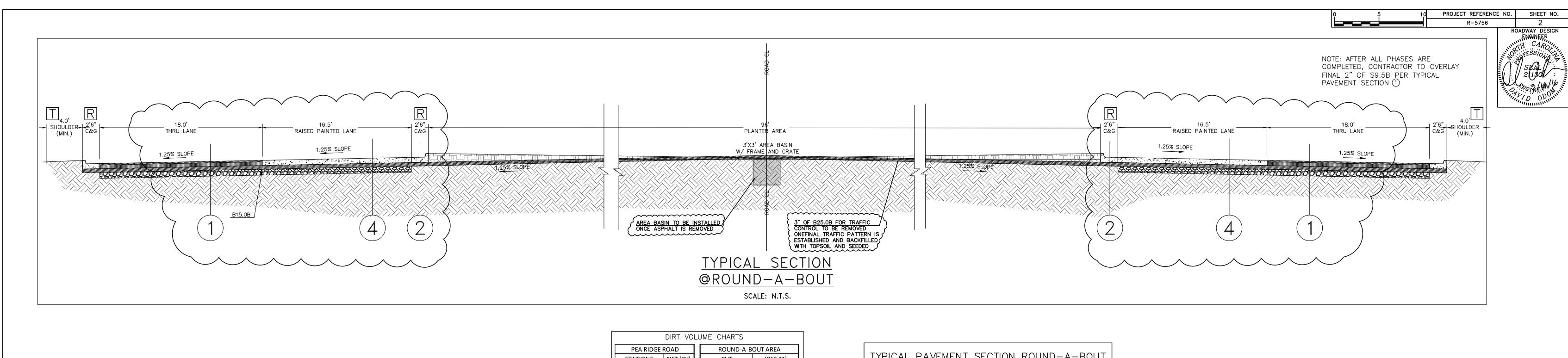
Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
		F	ROADWAY ITEMS			
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum	L.S.	
0003	0001000000-E	200	CLEARING & GRUBBING ACRE(S)	Lump Sum	L.S.	
0004	0036000000-E	225	UNDERCUT EXCAVATION	300 CY		
0005	0106000000-E	230	BORROW EXCAVATION	27,000 CY		
0006	0134000000-E	240	DRAINAGE DITCH EXCAVATION	500 CY		
0007	0141000000-E	240	BERM DITCH CONSTRUCTION	300 LF		
0008	0156000000-E	250	REMOVAL OF EXISTING ASPHALT PAVEMENT	6,994 SY		
0009	0222000000-E	SP	GEOTEXTILE FOR ROCK EMBANK- MENTS	100 SY		
0010	0318000000-E	300	FOUNDATION CONDITIONING MATE- RIAL, MINOR STRUCTURES	15 TON		
0011	0335300000-E	305	18" DRAINAGE PIPE	762 LF		
0012	0335400000-Е	305	24" DRAINAGE PIPE	200 LF		
0013	0453000000-E	310	**" PIPE END SECTION (18)	1 EA		
0014	0453000000-E	310	**" PIPE END SECTION (24)	1 EA		
0015	0995000000-E	340	PIPE REMOVAL	40 LF		
0016	1011000000-N	500	FINE GRADING	Lump Sum	L.S.	
0017	1121000000-E	520	AGGREGATE BASE COURSE	8,702 TON		
0018	1220000000-E	545	INCIDENTAL STONE BASE	135 TON		
0019	1245000000-E	SP	SHOULDER RECONSTRUCTION	0.94 SMI		

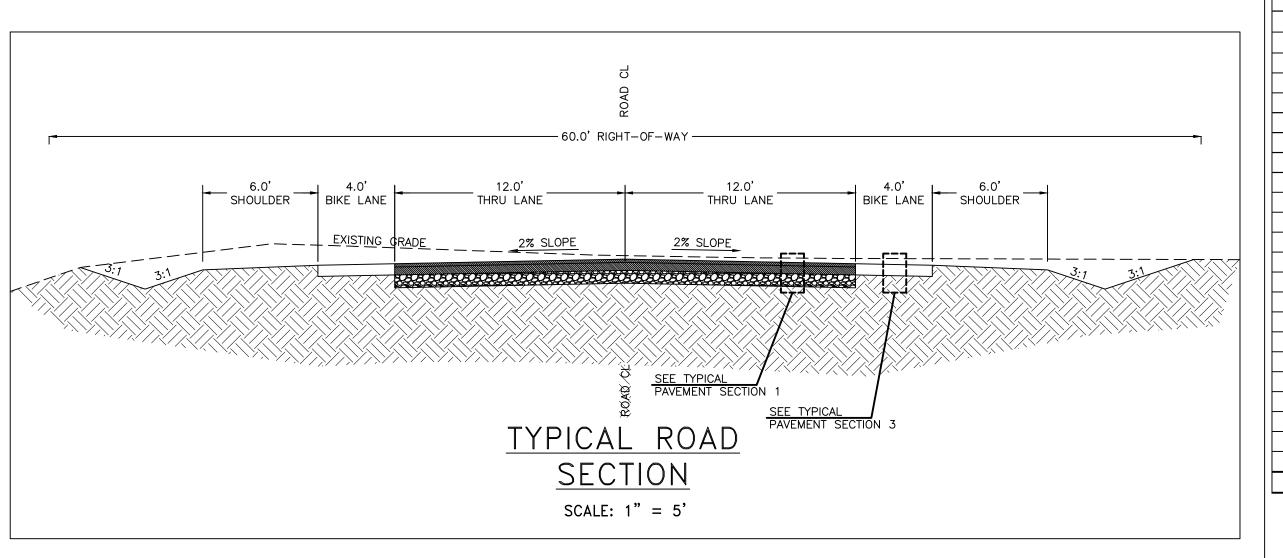
		#	Description	Quantity	Unit Cost	Amount
0020	1330000000-E	607	INCIDENTAL MILLING	420 SY		
0021	1489000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0B	3,380 TON		
0022	1498000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	3,100 TON		
0023	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	2,619 TON		
0024	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	443 TON		
0025	1693000000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	100 TON		
0026	2275000000-E	SP	FLOWABLE FILL	50 CY		
0027	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	13 EA		
0028	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	2 EA		
0029	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	5 EA		
0030	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	5 EA		
0031	2549000000-E	846	2'-6" CONCRETE CURB & GUTTER	1,410 LF		
0032	2655000000-E	852	5" MONOLITHIC CONCRETE ISLANDS (KEYED IN)	2,170 SY		
0033	2657000000-E	852	**" MONOLITHIC CONCRETE MEDIAN (*****) (5", KEYED IN)	600 SY		
0035	2845000000-N	858	ADJUSTMENT OF METER BOXES OR VALVE BOXES	5 EA		
0036	3030000000-E		STEEL BM GUARDRAIL	50 LF		
0037	3270000000-N	SP	GUARDRAIL ANCHOR UNITS, TYPE 350	2 EA		

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0038	3500000000-Е	866	WOVEN WIRE FENCE, **" FABRIC (48)	782		
			(40)	LF		
0039	3509000000-E	866	4" TIMBER FENCE POSTS, 7'-6"	100		
			LONG	EA		
0040	3515000000-Е	866	5" TIMBER FENCE POSTS, 8'-0"	8		
			LONG	EA		
0041	3566000000-E	867	WOVEN WIRE FENCE RESET	1,556		
				LF		
0042	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	81 SV		
0042	4006000000 NI		SIGN ERECTION, TYPE D	SY 		
0043	4096000000-N	904	SIGN ERECTION, TIPE D	4 EA		
0044	4102000000-N	904	SIGN ERECTION, TYPE E	4		
				EA		
0045	4108000000-N	904	SIGN ERECTION, TYPE F	4		
	440000000 F		WORK ZONE CIONO (OTATIONADO)	EA 		
0046	440000000-E	1110	WORK ZONE SIGNS (STATIONARY)	72 SF		
0047	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	150		
				SF		
0048	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	420 SF		
0049	4420000000-N	1120	PORTABLE CHANGEABLE MESSAGE SIGN	2		
			Oldiv	EA		
0050	4435000000-N	1135	CONES	50		
				EA		
0051	4445000000-E	1145	BARRICADES (TYPE III)	180 LF		
0052	4455000000-N	1150	 FLAGGER	 40		
0002		1100	12.002.1	DAY		
0053	4650000000-N	1251	TEMPORARY RAISED PAVEMENT	300		
			MARKERS	EA		
0054	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING	400		
			LINES (4", 90 MILS)	LF		
0055	4725000000-E	 1205	THERMOPLASTIC PAVEMENT MARKING	 11		
	· · · · · -	00	SYMBOL (90 MILS)	EA		

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0056	4810000000-Е	1205	PAINT PAVEMENT MARKING LINES (4")	61,281 LF		
0057	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	104 LF		
0058	4905000000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	40 EA		
0059	4915000000-E	1264	7' U-CHANNEL POSTS	120 EA		
0060	6000000000-E	1605	TEMPORARY SILT FENCE	3,300 LF		
0061	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	20 TON		
0062	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	100 TON		
0063	6012000000-E	1610	SEDIMENT CONTROL STONE	100 TON		
0064	6015000000-E	1615	TEMPORARY MULCHING	1 ACR		
0065	6018000000-Е	1620	SEED FOR TEMPORARY SEEDING	200 LB		
0066	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEED- ING	100 TON		
0067	6024000000-E	1622	TEMPORARY SLOPE DRAINS	100 LF		
0068	6030000000-E	1630	SILT EXCAVATION	650 CY		
0069	6036000000-E	1631	MATTING FOR EROSION CONTROL	7,000 SY		
0070	6037000000-E	SP	COIR FIBER MAT	160 SY		
0071	6042000000-E	1632	1/4" HARDWARE CLOTH	200 LF		
0072	6071010000-Е	SP	WATTLE	99 LF		
0073	6084000000-E	1660	SEEDING & MULCHING	4.25 ACR		
0074	6087000000-Е	1660	MOWING	4 ACR		

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0075	6090000000-E	1661	SEED FOR REPAIR SEEDING	50 LB		
0076	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	100 TON		
0077	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	50 LB		
0078	6117000000-N	SP	RESPONSE FOR EROSION CONTROL	3 EA		
0079	7980000000-N	SP	GENERIC SIGNAL ITEM (TEMP SIGNAL - 1 PAIR; PRE-TIM ED OR ACTUATED)	1 EA		
		V	VALL ITEMS			
0080	8802030000-E	SP	SEGMENTAL GRAVITY RETAINING WALLS	2,240 SF		
1554"	Mar16/Q139620.19/D2	7220224000)/E79 Total Amount Of Bid For	Entire Project		





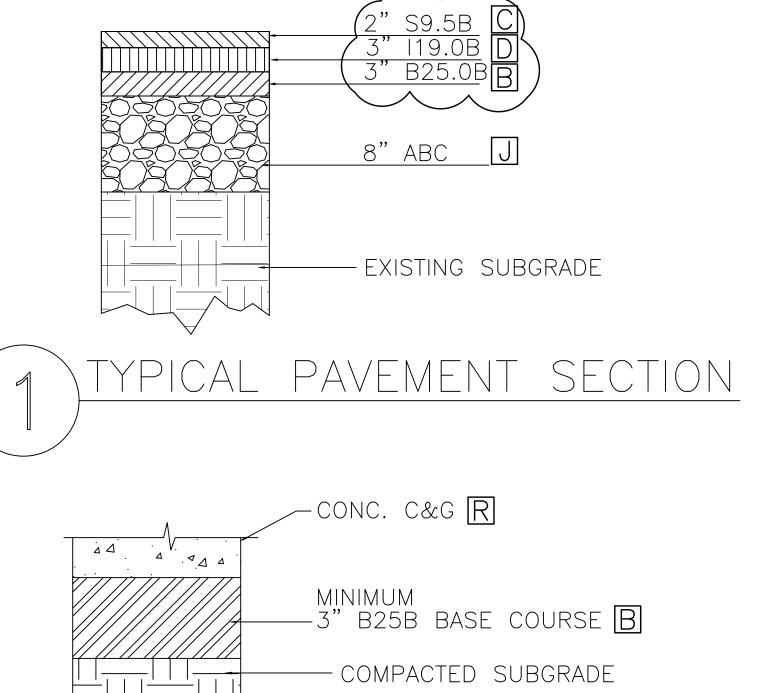
PEA RIDGE	ROAD	ROUND-A-B	OUT AREA
STATIONS	NET (CY)	CUT	(919.11)
0+00-0+50	(411.71)	FILL	1,530.56
0+50-1+00	(669.55)	NET	611.45
1+00-1+50	(868.07)		
1+50-2+00	(643.60)	SHEHAN	ROAD
2+00-2+50	(252.10)	STATIONS	NET (CY)
2+50-3+00	(101.85)	0+00-0+50	2,045.17
3+00-3+50	(77.63)	0+50-1+00	3,455.48
3+50-4+00	(81.53)	1+00-1+50	2,786.35
4+00-4+50	(158.77)	1+50-2+00	2,303.99
4+50-5+00	(216.25)	2+00-2+50	2,215.18
5+00-5+50	(139.94)	2+50-3+00	2,475.97
5+50-6+00	(97.24)	3+00-3+50	2,933.38
6+00-6+50	(31.72)	3+50-4+00	3,292.85
6+50-7+00	16.08	4+00-4+50	3,552.85
7+00-7+50	46.40	4+50-5+00	2,108.83
7+50-8+00	28.74	5+00-5+50	896.81
8+00-8+50	0.86	5+50-6+00	158.51
8+50-9+00	60.33	6+00-6+50	53.42
9+00-9+50	125.45	6+50-7+00	13.36
9+50-10+00	142.49	7+00-7+50	66.89
10+00-10+50	97.05	7+50-8+00	38.56
10+50-11+00	(6.31)	8+00-8+50	(10.31)
11+00-11+50	(21.53)	8+50-9+00	(50.13)
11+50-12+00	(113.34)	9+00-9+50	(70.60)
12+00-12+50	(265.65)	9+50-10+00	(53.16)
12+50-12+83	(89.72)	10+00-10+50	(44.69)
TOTAL (CY)	(3,729.11)	10+50-11+00	(10.99)
		11+00-11+50	(14.56)
		11+50-12+00	(21.01)
		12+00-12+50	(29.43)
		12+50-12+65	(101.55)
		TOTAL (CY)	27,991.17
		OVERAL NET (CY)	24,873.51

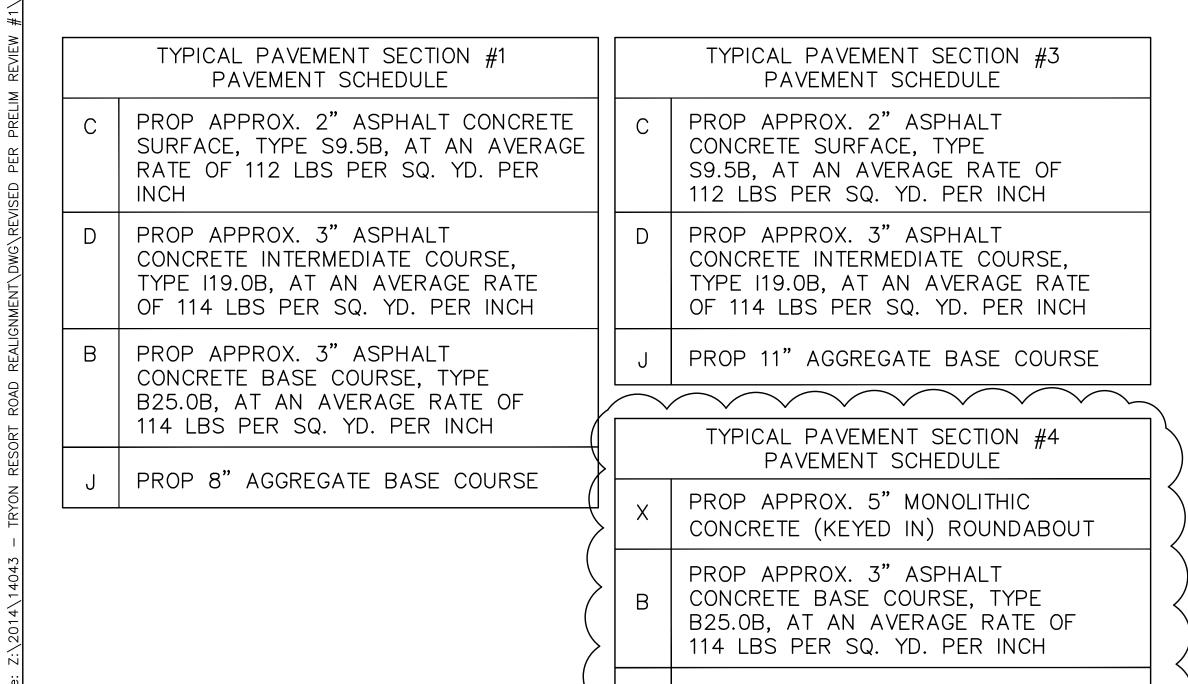
TYPICAL PAVEMENT SECTION ROUND-A-BOUT PAVEMENT SCHEDULE								
С	PROP APPROX. 2" ASPHALT CONCRETE SURFACE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS PER SQ. YD. PER INCH							
D	INTERMEDIATE COURSE, TYPE 119.0B, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD. PER INCH							
В								
TYPICAL PAVEMENT SECTION CURBING AND GUTTERING PAVEMENT SCHEDULE								
R	2'-6" CONCRETE CURB AND GUTTER							
В	PROP APPROX. 3" ASPHALT CONCRETE							

BASE COURSE, TYPE B25.0B, AT AN

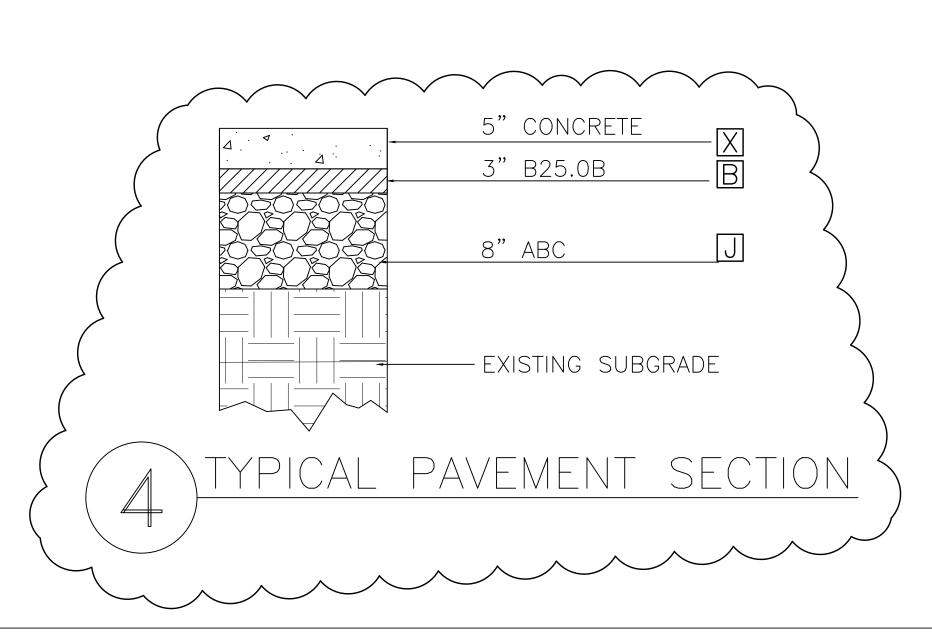
114 LBS PER SQ. YD. PER INCH

AVERAGE RATE OF

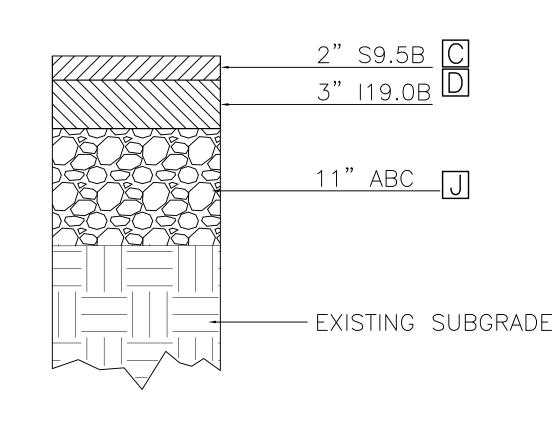




PROP 8" AGGREGATE BASE COURSE







TYPICAL PAVEMENT SECTION



March 17, 2016

ADDENDUM #4

To: Plan Holders

From: Jeffrey E. Alspaugh

Division 14 Proposal Engineer

RE: **Iran Divestment Act**

Contract ID: DN00455 County: Polk

Letting Date: March 22, 2016

This contract now has an additional special provision along with a corresponding certification form that will require signature. Both will need to be submitted as a part of your sealed bid.

Please insert this letter, the attached **Iran Divestment Act** special provision, along with the corresponding **Certification of Eligibility Under the Iran Divestment Act** form into the addendum section of the proposal and sign the verification.

Thank you for your attention to this matter.

(5-17-16) SP01 G151

As a result of the Iran Divestment Act of 2015 (Act), Article 6E, N.C. General Statute § 147-86.55, the State Treasurer published the Final Divestment List (List) which includes the Final Divestment List-Iran, and the Parent and Subsidiary Guidance-Iran. These lists identify companies and persons engaged in investment activities in Iran and will be updated every 180 days. The List can be found at https://www.nctreasurer.com/inside-the-department/OpenGovernment/Pages/Iran-Divestment-Act-Resources.aspx

By submitting the Offer, the Contractor certifies that, as of the date of this bid, it is not on the then-current List created by the State Treasurer. The Contractor must notify the Department immediately if, at any time before the award of the contract, it is added to the List.

As an ongoing obligation, the Contractor must notify the Department immediately if, at any time during the contract term, it is added to the List. Consistent with § 147-86.59, the Contractor shall not contract with any person to perform a part of the work if, at the time the subcontract is signed, that person is on the then-current List.

During the term of the Contract, should the Department receive information that a person is in violation of the Act as stated above, the Department will offer the person an opportunity to respond and the Department will take action as appropriate and provided for by law, rule, or contract.

CERTIFICATION OF ELIGIBILITY Under the Iran Divestment Act

Pursuant to G.S. 147-86.59, any person identified as engaging in investment activities in Iran, determined by appearing on the Final Divestment List created by the State Treasurer pursuant to G.S. 147-86.58, is ineligible to contract with the State of North Carolina or any political subdivision of the State. The Iran Divestment Act of 2015, G.S. 147-55 *et seq.** requires that each vendor, prior to contracting with the State certify, and the undersigned on behalf of the Vendor does hereby certify, to the following:

- 1. that the vendor is not identified on the Final Divestment List of entities that the State Treasurer has determined engages in investment activities in Iran;
- 2. that the vendor shall not utilize on any contract with the State agency any subcontractor that is identified on the Final Divestment List; and
- 3. that the undersigned is authorized by the Vendor to make this Certification.

Vendor: CLARY HOOD TWC	
By: Pttf	3-23-16
Signature	Date
PRESION A. PAINTER	PRESIDENT
Printed Name	Title

The State Treasurer's Final Divestment List can be found on the State Treasurer's website at the address www.nctreasurer.com/lran and will be updated every 180 days. For questions about the Department of State Treasurer's Iran Divestment Policy, please contact Meryl Murtagh at Meryl.Murtagh@nctreasurer.com or (919) 814-3852.

^{*} Note: Enacted by Session Law 2015-118 as G.S. 143C-55 et seq., but has been renumbered for codification at the direction of the Revisor of Statutes.



March 21, 2016

ADDENDUM # 5

To: Plan Holders

JEA

From: Jeffrey E. Alspaugh

Division 14 Proposal Engineer

RE: **Questions/Concerns & Answers/Clarifications - Walls**

Contract ID: DN00455 County: Polk

Letting Date: March 22, 2016

A bidder has posed the following question/concern regarding the above contract; the answers/clarifications statements to this question has been provided below:

- QUESTION/CONCERN: "There are two walls shown in the plans, one off of Shehan Road, and one off Pea Ridge Road. The wall detail appears to only address the wall off of Shehan Road. Is there a detail for the wall off of Pea Ridge Road?"
- ANSWER/CLARIFICATION: "The wall off of Shehan Road is the only wall to be constructed for this contract, so there is no other wall detail. The quantity, for the SEGMENTAL GRAVITY RETAINING WALLS, as shown in addendum # 3, reflects only the construction of the wall off of Shehan Road. There is no quantity for the wall off of Pea Ridge Road, as it is not to be constructed."

Please insert this letter into the addendum section of the proposal and sign the verification. Thank you for your attention to this matter.

Thank you for your attention to this matter.

AWARD LIMITS ON MULTIPLE PROJECTS

of \$	e awarded contracts, the value of which will not exceed a total
Form. Individual projects shall be	indicated by placing the project number and county in the not selected will not be subject to an award limit.
(Project Number)	(County)
(Project Number)	(County)
(Project Number)	(County)
(Project Number)	(County)
<u> </u>	total amount of work awarded to him in this letting, he shall ed above in the second line of this form.
total value of which is more that the will award me (us) projects from a	am (we are) the successful bidder on indicated projects, the ne above stipulated award limits, the Board of Transportation mong those indicated which have a total value not exceeding alt in the best advantage to the Department of Transportation.
	**Signature of Authorized Person

^{**}Only those persons authorized to sign bids under the provisions of Article 102-8, Item 7, shall be authorized to sign this form.

EXECUTION OF BID

NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

CORPORATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

SIGNATURE OF CO	VIRACTOR
Clary Hood, Inc	
Full name of Corpo	
4500	
150 Conway Black Road, Spa	
Address as Prequal	ified
Attack Ann D. McCus Por	1/2/-
Attest Secretary Assistant Secretary By	President/Vice President/Assistant Vice President
Select appropriate title	Select appropriate title
	., .
Tammy D. McCraw	Preston A. Painter
Print or type Signer's name	Print or type Signer's name
	greature of the College
	CORPORATE SEAL
AFFIDAVIT MUST BE	MOTADIZED
AFFIDAVII WUSI DE	NOTARIZED
Subscribed and sworn to before me this the	
<u>22nd</u> day of <u>March</u> 20 16.	Sept.
A OM A.	NIO(DADA/ CDAT
Jamy L'Illand	NOTARY SEAL
Signature of Notary Public	
of Spartanburg County	
Charles C. Could Counting	
State of South Carolina	
My Commission Expires: Nov. 21, 2016	
My Commission Expires: 140.001 Dove	

DEBARMENT CERTIFICATION

Conditions for certification:

- 1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation filed with the Department, or has become erroneous because of changed circumstances.
- 2. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
- 3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
- 4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR* 1273) provided by the Department, without subsequent modification, in all lower tier covered transactions.
- 5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
- 6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

DEBARMENT CERTIFICATION

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion affidavit and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

Check here if an explanation is attached to this certification.

Execution of Contract

Contract No: DN00455 County: Polk ACCEPTED BY THE DEPARTMENT DocuSigned by: Proposals Engineer 4/11/2016 Date **EXECUTION OF CONTRACT AND BONDS** APPROVED AS TO FORM: **Division Engineer** 4/11/2016 Date

Signature Sheet (Bid) - ACCEPTANCE SHEET

Bond No. 018039225

CONTRACT PERFORMANCE BOND

Date of Execution:

March 24, 2016

Name of Principal:

Clary Hood, Inc.

(Contractor)

150 Conway Black Road, Spartanburg, SC 29307

Name of Surery:

Liberty Mutual Insurance Company

175 Berkeley Street , Boston, MA 02116

Name of Contracting Body:

The Department of Transportation, an agency of the State

of North Carolina

Amount of Bond:

One Million Eight Hundred Thirty One Thousand Two Hundred Ninety Nine Dollars and 20/100 \$1,831,299.20

Contract Number:

(Project Number)

DN00455

KNOW ALL MEN BY THESE PRESENTS, that we, the PRINCIPAL and SURETY above name, are held and firmly bound unto the above name Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount state above for the payment of which sum well and truly to be made, we bind ourselves, out heirs, executors, administrators, and successors, jointly and severally firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCII, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto anached:

NOW THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived. then, this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate pury being hereto affixed and these presents duly signed by its undersigned representatives, pursuant to authority of its governing body.

CONTRACT PERFORMANCE BOND

(Seal of Surety Company)	Liberty Mutual Insurance Company (Surety Company)					
By Lor	i L. Jacobs (Attorney-in-Fact)					
Witness:						
Adrian C. Burchett	175 Berkeley Street , Boston, MA 02116 (Address of Attorncy-in-Fact)					
Countersigned:	Kemith of Peepler					
	(Licensed Resident Agent in N. C.) Kenneth J. Peeples					
	·					
	(Address of Resident Agent)					
The undersigned certified that he has received or anticipates receiving the commission on the contract bond. Marian C. Newman (Agent)						
SIGNATURE OF CONTRACTOR (PRINCIPAL) (If a Corporation, use this sheet)						
Clary Ho						
(Print full name	of Convoration)					
Ву	(seal)					
Δ.	(President or Vice President) (Delete inappropriate title)					
Attest: Danny O. Mchaw						
(Secretary or Assistant Secretary) (Delete inappropriate title)						

Bond No. 018039225

CONTRACT PAYMENT BOND

Date of Execution:

March 24, 2016

Name of Principal:

Clary Hood, Inc.

(Contractor)

150 Conway Black Road, Spartanburg, SC 29307

Name of Surery:

Liberty Mutual Insurance Company

Name of Contracting Body:

175 Berkeley Street , Boston, MA 02116

Amount of Bond:

One Million Eight Hundred Thirty One Thousand Two Hundred Ninety Nine Dollars and 20/100

\$1,831,299.20

Contract Number:

DN00455

(Project Number)

KNOW ALL MEN BY THESE PRESENTS, that we, the PRINCIPAL and SURETY above name, are held and firmly bound unto the above name Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount state above for the payment of which sum well and truly to be made, we bind ourselves, out heirs, executors, administrators, and successors, jointly and severally, firmly by these presents:

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the principal entered into a certain contract with the Contracting Body numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contact, and any and all duly authorized modifications of said contract, and any and all duly authorized modifications of said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representatives, pursuant to authority of its governing body.

CONTRACT PAYMENT BOND

(Seal of Surery Company)	Liberty Mutual Insurance Company (Surety Company)
B	Lori L. Jacobs Allomey-in-Fact (Print. Stamp. or Type Signer's Name)
	By: Signature of Attorney-in-Fac:
Idrian Churchett Witness	_
Adrian C. Burchett (Print or Type Signer's Name)	_
	175 Berkeley Street, Boston, MA 02116 Address of Attorney-in-Fact

CONTRACT PAYMENT BOND

SIGNATURE OF CONTRACTOR (PRINCIPAL) (If a Corporation, use this sheet.)

Clary Hood, Inc.

(Print full name of Corporation)

(Scal)

Ву

President
Vice President

Assistant Vice President (Delete inappropriate title)

(Print or Type Signer's Name)

Attest

Secretary or Assistant Secretary (Delete inappropriate title)

(Print or Type Signer's Name)

Affix Corporate Scal

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6587356

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, _____Adrian C. Burchett; Alfred T. Johnson; Della B. Case; Duainette H. Cullum; Frank W. Hafner, Jr.; Lori L. Jacobs; Marian C. Newman; _____Robert J. Lavisky; Wesley V. Dasher, Jr.

all of the city of <u>Columbia</u>, state of <u>SC</u> each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 22nd day of May , 2014 .



Liberty Mutual Insurance Company West American Insurance Company

American Fire and Casualty Company
The Ohio Casualty Insurance Company

David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA COUNTY OF MONTGOMERY

SS

On this 22nd day of May , 2014, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Notarial Seal Terese Pastella, Notary Public Plymouth Twp., Montgomery County My Commission Expires March 28, 2017

Member, Pennsylvania Association of Notaries

By: Leresa Pastella Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-infact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this

ND CAS INTO THE UNITED THE WAS UP TO THE UNITED THE UNITED

Gregory W. Davenport, Assistant Secretary



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 4/11/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the

certificate fiolitics of such chaof sement(s).				
PRODUCER	CONTACT NAME: Certificates			
Parrish & Gwinn Insurance Group LLC	PHONE (A/C, No, Ext): (803)799-1160 FAX (A/C, No): (803)799-1159			
1401 Main Street	E-MAIL ADDRESS: certificates@pginsgroup.com			
Suite 601	INSURER(S) AFFORDING COVERAGE	NAIC #		
Columbia SC 29201	INSURER A : Zurich, NA	16535		
INSURED	INSURER B:Travelers P&C Co. of America	25674		
Clary Hood, Inc.	INSURER C:			
150 Conway Black Road	INSURER D:			
	INSURER E:			
Spartanburg SC 29307	INSURER F:			

COVERAGES CERTIFICATE NUMBER:16-17 AI GL

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR		TYPE OF INSURANCE		SUBR WVD		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
	GENERAL LIABILITY							EACH OCCURRENCE	\$	1,000,000
	х	COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	100,000
Α		CLAIMS-MADE X OCCUR	Х		GL03757272 10	3/1/2016	3/1/2017	MED EXP (Any one person)	\$	10,000
	X Broad Form CGL							PERSONAL & ADV INJURY	\$	1,000,000
	Х	X, C, U Coverage						GENERAL AGGREGATE	\$	2,000,000
	GEN	I'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	\$	2,000,000
		POLICY X PRO- JECT X LOC							\$	
	AUT	OMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000
A	Х	ANY AUTO						BODILY INJURY (Per person)	\$	
	ALL OWNED SCHEDULED AUTOS AUTOS				BAP3757273 10	3/1/2016	3/1/2017	BODILY INJURY (Per accident)	\$	
	Х	HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	\$	
									\$	
	Х	UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	\$	15,000,000
В		EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$	15,000,000
		DED X RETENTION\$ 10,000			ZUP-14P48582-16-NF	3/1/2016	3/1/2017		\$	
A	AND EMPLOYEDELLIABILITY							X WC STATU- OTH- TORY LIMITS ER		
	ANY PROPRIETOR/PARTNER/EXECUTIVE							E.L. EACH ACCIDENT	\$	1,000,000
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)				WC3757271 10	3/1/2016	3/1/2017	E.L. DISEASE - EA EMPLOYEE	\$	1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT	\$	1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: Contract DN00455.

Certificate holder named Additional Insured on General Liability as required per written contract.

CERTIFICATE HOLDER	CANCELLATION				
NC Department of Transportation 253 Webster Road	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.				
Sylva, NC 28779	AUTHORIZED REPRESENTATIVE				
	Mark Parrish/KSH				